



U.S. Department of Justice

Federal Bureau of Prisons

Washington, DC 20534

December 29, 2005

RE: Environmental Assessment - Proposed Deactivation and Closure of Federal Prison Camp, Nellis Air Force Base - Clark County, Nevada

Dear Sir/Madam:

The U.S. Department of Justice, Federal Bureau of Prisons (BOP) is pleased to provide you with a copy of the Environmental Assessment (EA) for the proposed for the deactivation and closure of the Federal Prison Camp (FPC) located at Nellis Air Force Base north of the City of Las Vegas in Clark County, Nevada. This document is provided to fulfill the requirements of the National Environmental Policy Act (NEPA) of 1969, as amended and the requirements of Section 106 of the National Historic Preservation Act, as amended.

With the continuous increase in the federal inmate population and constraints to the availability of funding, the BOP is undertaking a broad array of cost reduction measures including the deactivation and closure of correctional facilities considered outdated, obsolete and/or costly to operate and maintain. The costs associated with the continued maintenance and operation of the FPC at Nellis Air Force Base provides the rationale for considering its deactivation and closure.

During the past decade, the BOP has concentrated on achieving cost reductions through shared services at co-located facilities. This has enabled the BOP to operate with lower staffing requirements, share medical services and equipment, and provide inmate labor for regular maintenance and repairs at these facilities. This approach avoids the higher operational costs of stand-alone facilities and the proposed closure of the FPC would achieve these benefits and help the BOP to maintain low per capita operating costs. FPC staff and inmates would be relocated to other BOP facilities.

The EA studies potential environmental impacts associated with the deactivation and closure of the FPC including impacts to the natural and manmade environments associated with the proposed project. The EA will be the subject of a 30-day review period which begins January 6, 2006, and ends February 6, 2006. Comments concerning the document and the proposed action must be received during this time to be assured of consideration and should be sent to:

Report Documentation Page		<i>Form Approved OMB No. 0704-0188</i>
<p>Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</p>		
1. REPORT DATE JAN 2006	2. REPORT TYPE	3. DATES COVERED 00-00-2006 to 00-00-2006
4. TITLE AND SUBTITLE Environmental Assessment - Proposed Deactivation and Closure of Federal Prison Camp, Nellis Air Force Base, Nevada		5a. CONTRACT NUMBER
		5b. GRANT NUMBER
		5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)		5d. PROJECT NUMBER
		5e. TASK NUMBER
		5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Department of Justice, Federal Bureau of Prisons, 320 First Street, N.W., Washington, DC, 20534		8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited		
13. SUPPLEMENTARY NOTES		

14. ABSTRACT

PROPOSED ACTION PROJECT LOCA TI0:-1 FINDINGS U.S. Department of Justice-Federal Bureau of Prisons Pamela J. Chandler, Chief Site Selection and Environmental Review Branch Federal Bureau of Prisons 320 First Street, N. W. Washington, D.C. 20534 Tel: 202-514-6470 The U.S. Department of Justice, Federal Bureau of Prisons (BOP) is responsible for housing the federal inmate population in secure institutional facilities. In order to more efficiently and effectively manage minimum-security bedspace and to achieve substantial budget reductions, the BOP is proposing to deactivate (close) four older, stand-alone minimum-security facilities that are referred to as Federal Prison Camps (FPC). FPC Nellis Air Force Base in Clark County, Nevada, is one of the four facilities proposed for deactivation and closure; others are located in Pennsylvania, Florida, and North Carolina. Deactivating and closing less efficient, stand-alone institutions would enable the BOP to more efficiently and effectively manage minimum-security beds throughout the federal prison system, particularly beds available in satellite minimum-security work camps that are located adjacent to larger, more secure federal correctional facilities. Because stand-alone facilities cannot take full advantage of shared services possible at multi-facility locations, such as medical services, food services, and administrative functions, FPCs, such as FPC Nellis Air Force Base, are more costly to operate. In addition, by taking this action, the cost of undertaking the repair and/or upgrade of the existing infrastructure would be avoided. Opportunities exist for FPC staff to relocate to other BOP facilities should staff wish to take advantage of them. As a result of implementing the proposed action, the BOP expects to achieve more efficient operations and substantial cost reductions. The FPC, which is the subject of this EA, is located Within Area II at Nellis Air Force Base. The base is located adjacent to and east of the City of North Las Vegas in Clark County, Nevada approximately eight miles north of the City of Las Vegas. Alternatives, including the No Action Alternative, have been considered by the BOP. Implementation of the preferred alternative (deactivation and closure of the FPC) is not anticipated to result in significant adverse impacts to the area's natural environment, built environment or to the economy of the region. Beneficial impacts, in the form of substantial cost reductions to the BOP, would result by eliminating the need to maintain and operate a less efficient facility and by relocating inmates and staff to other facilities which are less costly to operate and maintain. Following deactivation and closure, the grounds and all standing buildings comprising the FPC would be returned to the U.S. Air Force by the BOP as mutually agreed upon.

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	99	

Page 2
December 29, 2005

■ Pamela J. Chandler, Chief
Site Selection & Environmental Review Branch
Federal Bureau of Prisons
320 First Street, N.W.
Washington, D.C. 20534
Tel: 202-514-6470 / Fax: 202-616-6024

All written comments received during this review period would be taken into consideration by the BOP. A review of the EA leads to a Finding of No Significant Impact (FONSI) as defined in NEPA. The proposed action would result in no significant adverse impacts to the project site and surrounding community. Based on the EA, a FONSI will be signed and become final 30 days following publication of the EA and a Notice of Availability of the EA in the local newspaper, provided that no information leading to a contrary finding is received or comes to light during the 30-day period afforded for public review and comment.

Copies of the EA are also available for public viewing at the following locations: Las Vegas-Clark County Library District, 833 Las Vegas Boulevard, North Las Vegas, Nevada; North Las Vegas Library District, 2300 Civic Center Drive, North Las Vegas, Nevada; and Nellis Air Force Base Library, 4311 North Washington Boulevard, Building 312, Suite 101, Nellis Air Force Base, Nevada. Thank you for your interest.

Sincerely yours,



Pamela J. Chandler, Chief
Site Selection and Environmental
Review Branch

Attachment
cc: R. Nardi, Berger
I. Gaston, BOP
K. Domako, USAF

Proposed Deactivation and Closure of Federal Prison Camp Nellis Air Force Base, Nevada

Environmental Assessment

Lead Agency:
**U.S. Department of Justice
Federal Bureau of Prisons
Washington, D.C.**



Prepared in Conjunction with:
The Louis Berger Group, Inc.
Washington, D.C.

January 2006

FINDING OF NO SIGNIFICANT IMPACT
PROPOSED DEACTIVATION AND CLOSURE OF
FEDERAL PRISON CAMP
NELLIS AIR FORCE BASE
LAS VEGAS, NEVADA

DESCRIPTION OF PROPOSED ACTION

The U.S. Department of Justice, through the Federal Bureau of Prisons (BOP), proposes to deactivate and close the Federal Prison Camp (FPC) located at Nellis Air Force Base, Las Vegas, Nevada, in order to more efficiently and effectively utilize existing minimum security bedspace throughout our system. The BOP is undertaking a broad array of cost reduction measures including the deactivation and closure of several minimum security federal prisons. It is more efficient and cost effective to close this FPC and house the inmates in satellite minimum security work camps that are located adjacent to more secure facilities. Also, the age and condition of the FPC located in Nellis and the costs associated with its continued maintenance and operation provide additional rationale for considering its deactivation and closure.

Projections show the BOP will be able to achieve substantial cost reductions by deactivating and closing this FPC. Cost reductions will be realized as a result of the more efficient use of bedspace available in minimum security work camps that are located adjacent to higher security facilities and by avoiding costs associated with the infrastructure repairs and upgrades that would be needed in order to continue operating Nellis in a safe and efficient manner. Staff will be absorbed into the personnel complement at existing facilities where vacancies exist.

Alternative actions have been evaluated by the BOP in accordance with the National Environmental Policy Act of 1969, as amended including:

- No Action Alternative. Implementation of this alternative would preclude the BOP from proceeding with the deactivation and closure of FPC Nellis.

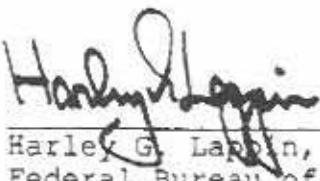
SIGNED

- FPC Deactivation and Closure Alternative - Implementation of this alternative would allow the BOP to achieve substantial cost reductions through the better utilization of existing minimum security bedspace at other BOP facilities and by avoiding costs associated with continued maintenance, operation, repair and upgrading of the existing facility. Deactivation and closure of the FPC is considered by the BOP to be the Preferred Alternative.

The impacts of the proposed action on the environment were considered in an Environmental Assessment (EA) prepared pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended. Review of the EA leads to a Finding of No Significant Impact (FONSI) as that phrase is defined pursuant to NEPA. Implementation of the proposed action would result in negligible impacts to the local community. There would be no significant adverse impacts to surrounding land uses, utility systems, traffic patterns or other community considerations. No significant adverse on-site impacts as defined pursuant to NEPA are anticipated as a result of the proposed action.

DECLARATION

Pursuant to the requirements of the National Environmental Policy Act and subsequent guidelines for preparing environmental documents, I have determined that this proposed action is not a federal action significantly affecting the quality of the human environment.



Harley G. Lappin, Director
Federal Bureau of Prisons



Date

ABSTRACT

ABSTRACT

ENVIRONMENTAL ASSESSMENT DEACTIVATION AND CLOSURE OF FEDERAL PRISON CAMP NELLIS AIR FORCE BASE - CLARK COUNTY, NEVADA

PROJECT SPONSOR: U.S. Department of Justice—Federal Bureau of Prisons

CONTACT: Pamela J. Chandler, Chief
Site Selection and Environmental Review Branch
Federal Bureau of Prisons
320 First Street, N.W.
Washington, D.C. 20534
Tel: 202-514-6470

PROPOSED ACTION: The U.S. Department of Justice, Federal Bureau of Prisons (BOP) is responsible for housing the federal inmate population in secure institutional facilities. In order to more efficiently and effectively manage minimum-security bedspace and to achieve substantial budget reductions, the BOP is proposing to deactivate (close) four older, stand-alone minimum-security facilities that are referred to as Federal Prison Camps (FPC).

FPC Nellis Air Force Base in Clark County, Nevada, is one of the four facilities proposed for deactivation and closure; others are located in Pennsylvania, Florida, and North Carolina. Deactivating and closing less efficient, stand-alone institutions would enable the BOP to more efficiently and effectively manage minimum-security beds throughout the federal prison system, particularly beds available in satellite minimum-security work camps that are located adjacent to larger, more secure federal correctional facilities. Because stand-alone facilities cannot take full advantage of shared services possible at multi-facility locations, such as medical services, food services, and administrative functions, FPCs, such as FPC Nellis Air Force Base, are more costly to operate. In addition, by taking this action, the cost of undertaking the repair and/or upgrade of the existing infrastructure would be avoided. Opportunities exist for FPC staff to relocate to other BOP facilities should staff wish to take advantage of them. As a result of implementing the proposed action, the BOP expects to achieve more efficient operations and substantial cost reductions.

PROJECT LOCATION: The FPC, which is the subject of this EA, is located within Area II at Nellis Air Force Base. The base is located adjacent to and east of the City of North Las Vegas in Clark County, Nevada approximately eight miles north of the City of Las Vegas.

FINDINGS: Alternatives, including the No Action Alternative, have been considered by the BOP. Implementation of the preferred alternative (deactivation and closure of the FPC) is not anticipated to result in significant adverse

impacts to the area's natural environment, built environment or to the economy of the region. Beneficial impacts, in the form of substantial cost reductions to the BOP, would result by eliminating the need to maintain and operate a less efficient facility and by relocating inmates and staff to other facilities which are less costly to operate and maintain. Following deactivation and closure, the grounds and all standing buildings comprising the FPC would be returned to the U.S. Air Force by the BOP as mutually agreed upon.

PUBLICATION DATE: January 6, 2006

COMMENT PERIOD
CONCLUDES: February 6, 2006

TABLE OF CONTENTS

TABLE OF CONTENTS

	Page
ABSTRACT	<i>Abstract Page 1</i>
I. INTRODUCTION	I-1
A. Purpose of the Environmental Assessment	I-1
B. Background	I-1
C. Description of the Proposed Action	I-3
1. Introduction	I-3
2. Federal Prison Camp - Nellis Air Force Base	I-5
3. Inmate Programs	I-7
4. Need for the Proposed Action	I-7
II. ALTERNATIVES	II-1
A. No Action Alternative	II-1
B. FPC Deactivation and Closure Alternative	II-2
III. AFFECTED ENVIRONMENT	III-1
A. Site Characteristics	III-1
1. Topography	III-1
2. Geology	III-3
3. Soils	III-3
4. Hydrology	III-4
5. Biological Resources	III-4
6. Cultural Resources	III-7
7. Aesthetics	III-8
8. Fiscal Considerations	III-8
9. Hazardous Substances	III-8
B. Community and Regional Characteristics	III-11
1. Population	III-11
2. Economic Characteristics	III-13
3. Housing	III-14
4. Community Services	III-15
5. Land Use	III-17
6. Utility Services	III-17
7. Transportation Systems	III-18
8. Meteorological Conditions	III-18
9. Air Quality	III-19
10. Noise	III-21

TABLE OF CONTENTS (CONTINUED)

	Page
IV. ENVIRONMENTAL CONSEQUENCES IMPACTS AND MITIGATION	IV-1
A. Site Characteristics	IV-1
1. Topography	IV-1
2. Geology	IV-2
3. Soils	IV-2
4. Hydrology	IV-3
5. Biological Resources	IV-3
6. Cultural Resources	IV-4
7. Aesthetics	IV-4
8. Fiscal Considerations	IV-5
9. Hazardous Substances	IV-5
B. Community and Regional Characteristics	IV-6
1. Population	IV-6
2. Economic Characteristics	IV-7
3. Housing Characteristics	IV-8
4. Community Services	IV-8
5. Land Use	IV-9
6. Utility Services	IV-10
7. Transportation Systems	IV-11
8. Meteorological Conditions	IV-11
9. Air Quality	IV-12
10. Noise	IV-12
C. Summary of Any Significant Impacts and Required Mitigation	IV-13
D. Relationship Between Short-Term Use of the Environment and the Maintenance and Enhancement of Long-Term Productivity	IV-13
E. Irreversible and Irretrievable Commitment of Resources	IV-14
F. Secondary and Cumulative Consideration of Impacts	IV-14
V. REFERENCES	V-1
A. Documents	V-1
B. Personal Communications	V-2
VI. LIST OF PREPARERS	VI-1

TABLE OF CONTENTS (CONTINUED)

	Page
VII. AGENCIES AND OFFICIALS FROM WHICH COMMENTS ARE REQUESTED .	VII-1
A. Congressional Delegation	VII-1
1. U.S. Senators	VII-1
2. U.S. Congressmen	VII-1
B. Federal Officials and Agencies	VII-1
C. State of Nevada Officials and Agencies	VII-2
D. Clark County Officials and Agencies	VII-2
E. Municipal Officials and Agencies	VII-3
F. Others	VII-3

LIST OF APPENDICES

Appendix A	Correspondence	A-1
Appendix B	Rare Species List - Clark County, Nevada	B-1
Appendix C	Environmental Baseline Survey - Federal Prison Camp, Nellis Air Force Base	C-1
	(Disk copy enclosed)	

TABLE OF CONTENTS (CONTINUED)

	Page
LIST OF EXHIBITS	
Exhibit I-1	Regional Location Map
Exhibit I-2	Minimum-Security Inmate Profile
Exhibit I-3	Site Location Map
Exhibit III-1	Site Topography
Exhibit III-2	Floodplain Map
Exhibit III-3	View of FPC Nellis Air Force Base
Exhibit III-4	FPC Real Property Survey - Nellis Air Force Base
Exhibit III-5	Population Trends - Nellis AFB, Las Vegas, Clark County, and Nevada
Exhibit III-6	Labor Force Characteristics - Las Vegas, Clark County, and Nevada
Exhibit III-7	Top Ten Employers - Clark County, Nevada
Exhibit III-8	Housing Types - Clark County, Nevada
Exhibit III-9	Selected Housing Characteristics - Las Vegas City, Clark County, and Nevada
Exhibit III-10	Description of NAAQS Criteria Pollutants
Exhibit III-11	Air Quality Monitoring Data - Las Vegas, Nevada
Exhibit III-12	Common Sounds Expressed in Decibels

I. INTRODUCTION

I. INTRODUCTION

A. PURPOSE OF THE ENVIRONMENTAL ASSESSMENT

This document, together with its appendices and incorporations by reference, constitutes an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended. Its purpose is to present an assessment of the environmental consequences of a proposed action by the U.S. Department of Justice, Federal Bureau of Prisons (BOP), to deactivate and close the Federal Prison Camp (FPC) located at Nellis Air Force Base which is located adjacent to North Las Vegas in Clark County, Nevada (Exhibit I-1). In order to more efficiently manage minimum-security bedspace and to achieve substantial budget reductions, the BOP is implementing a number of cost reduction and streamlining initiatives. Among those initiatives is the deactivation and closure of four older, stand-alone prison camp facilities. The Federal Prison Camp (FPC) located at Nellis Air Force Base is one of four stand-alone FPCs currently under consideration for deactivation and closure.

Chapter I of the EA provides the background and context of the proposed action. Chapter II describes alternatives to the proposed action together with the reasons for their elimination. Chapter III describes existing conditions within the potentially affected environment. Chapter IV describes potential impacts of the proposed action and mitigation measures, if warranted. Additional information is provided in the remaining chapters and appendices as indicated by the Table of Contents.

The EA, the assessment it presents, and the procedures by which the environmental investigations are conducted and incorporated in decision-making are parts of a process established by NEPA to ensure that the environmental consequences of federal actions are adequately taken into account. The process is designed to ensure that public officials make decisions based on a full understanding of the environmental impacts of proposed actions and take all appropriate steps to *"protect, restore and enhance the environment"* (40 CFR 1501.7).

B. BACKGROUND

The BOP operates institutions of different security levels to appropriately house a broad spectrum of offenders. Security levels are based on such features as the presence of external patrols, guard towers, security barriers, or detection devices; the type of housing within the institution; internal security features; and the staff-to-inmate ratio. Each facility is placed in one of five groups - minimum-security, low-security, medium-security, high-security, and administrative as described below:

- **Minimum-Security.** Minimum-security institutions, also known as FPCs, have dormitory housing, a relatively low staff-to-inmate ratio, no perimeter security fences, and are work- and program-oriented. Some FPCs are located on military bases where inmates help serve the labor needs of the institution or base. The FPC located at Nellis Air Force Base is an example of a stand-alone camp and is one of 10 similar stand-alone camps operated by the BOP around the country.
- **Low-Security.** Low-security Federal Correctional Institutions (FCI) have double-fenced perimeters, mostly dormitory housing, and strong work and program components. The staff-to-inmate ratio in these institutions is higher than in minimum-security facilities.



- **Medium-Security.** Medium-security FCIs have strengthened perimeters (often double-fences with electronic detection systems), cell-type housing, a wide variety of work and treatment programs, and a higher staff-to-inmate ratio than low-security institutions, providing even greater controls.
- **High-Security.** High-security institutions, also known as United States Penitentiaries (USP), have highly secure perimeters (either walled or double-fenced with a taut wire fence detection system), guard towers, multiple and single occupant cell housing, and close staff supervision and movement controls.
- **Administrative.** Administrative facilities are institutions housing offenders or detainees who require an uncommon level of security due to their serious records of institutional misconduct, involvement in violent or escape-related behavior, and/or who have unusual security needs based on the nature of their offense. These facilities also have highly secure perimeters (either walled or double fenced), including the use of guard towers.

The BOP uses a classification system to determine an inmate's security level based on factors such as severity of the offense, expected length of incarceration, and types of prior offenses. FPCs are generally the least restrictive environment and house inmates at the lowest security levels, usually those serving short sentences or nearing the completion of longer sentences begun elsewhere. Low-and medium-security FCIs present increasingly more restrictive environments, while USPs provide high-security and very restrictive environments. Administrative maximum facilities provide for the highest level of security and the most restrictive conditions within the federal prison system.

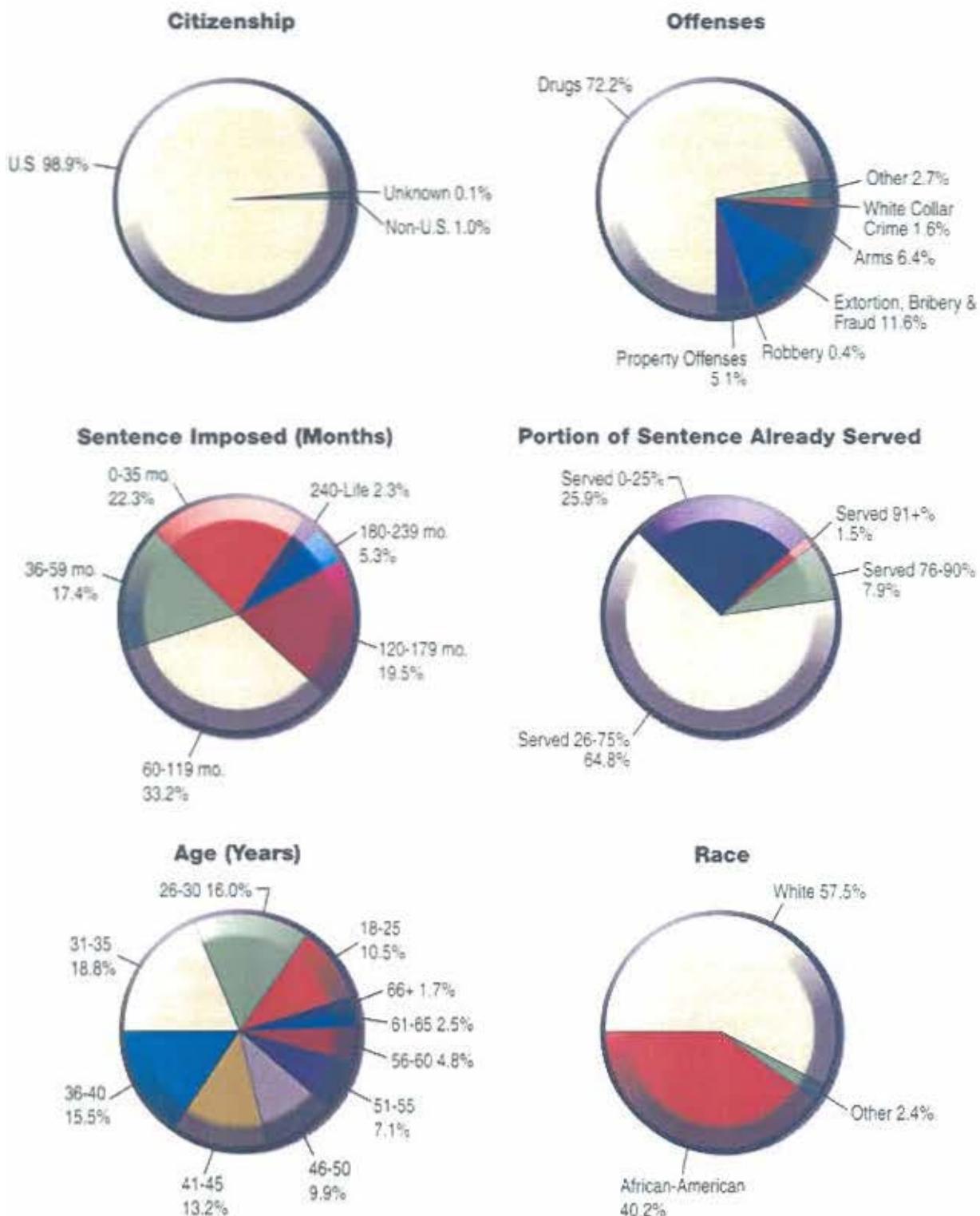
The inmate classification system has proven effective in that it enables the BOP to separate violent offenders from the rest of the inmate population, keep the inmate population in better balance, decrease the number of inmate transfers, and make better use of available resources, while confining offenders in the least restrictive environment. Exhibit I-2 presents statistics compiled by the BOP which provide insight into the composition of all inmates housed in minimum-security facilities (such as FPC Nellis Air Force Base).

C. DESCRIPTION OF THE PROPOSED ACTION

1. Introduction

The objectives of the proposed action are to more efficiently and effectively manage minimum-security beds and to reduce overall BOP operating costs by deactivating and closing a less efficient stand-alone FPC. The BOP is undertaking a broad array of cost reduction and streamlining measures including the deactivation and closure of correctional facilities considered outdated, obsolete and/or more costly to operate and maintain. The costs associated with the continued operation and maintenance of the FPC located at Nellis Air Force Base provides the rationale for considering its deactivation and closure.

Projections show the BOP achieving substantial cost reductions by deactivating and closing this FPC. Doing so would also allow the BOP to avoid essential infrastructure upgrades required over the next several years in order to continue to operate the camp. During the deactivation and closure process, FPC staff and inmates would be relocated to other facilities which are less costly to operate. Following closure, the grounds and all standing buildings comprising the FPC would be returned to the U.S. Air Force in accordance with the terms and conditions of the agreement between the BOP and the U.S. Air Force which allowed for the establishment of the FPC.



Note: Statistics are based on data from minimum-security FPCs
 Source: Federal Bureau of Prisons, 2004.

2. Federal Prison Camp - Nellis Air Force Base

a. Base Mission and History

Nellis Air Force Base is located in southeastern Nevada in Clark County. The base, a U.S. Air Force Air Combat Command facility, and its associated Range Complex are an integral part of the training and readiness missions of the U.S. Air Force. The Nellis Air Force Base flight line is active year-round servicing and refueling military aircraft of all types. The Nellis Range Complex serves as the largest live-fire range available for training in the United States, and Nellis Air Force Base is the chief facility supporting this training mission.

From 1929 to 1940, the present location of Nellis Air Force Base consisted of an airfield with dirt runways that was used for private aviation purposes. The airfield was then purchased by the City of Las Vegas and developed by the U.S. Army Air Corps, who began use of the field for military operations in 1942. From 1942 to 1945, the site, known as the Las Vegas Army Airfield, was used as an aerial gunnery and flight training school for B-17 and B-29 crews.

Following the end of World War II, the site was used as a center for military personnel separating from active duty. In 1947, the site was reactivated as Las Vegas Air Force Base and served as a fighter pilot training wing. In 1950, the base was renamed Nellis Air Force Base, to honor a locally born pilot killed in action in World War II. Throughout the 1950s and 1960s, the service population at Nellis Air Force Base remained stable during which time the base was transferred to the Tactical Air Command. In 1956, the U.S. Air Force Demonstration Squadron, the "Thunderbirds," was transferred to Nellis Air Force Base. Wartime studies during the 1960s and 1970s indicated that most fatalities involving new pilots occurred during their first combat missions. This finding led to the creation of the first Red Flag exercises in 1976 at Nellis Air Force Base, which continue to the present. The Red Flag exercises bring numerous U.S. and Allied aircraft and personnel to Nellis Air Force Base for air-to-air and air-to-ground combat training over the Nellis Range Complex and the U.S. Army National Guard Training Center at Fort Irwin, California. Additionally, the 66th Rescue Squadron operates helicopters from Nellis Air Force Base.

In 1989, the BOP became aware of available facilities at Nellis Air Force Base which could be utilized to house a portion of its minimum-security inmate population. In cooperation with the U.S. Air Force, the BOP established the FPC in December 1989 and has been operating the facility continuously since that date.

b. Federal Prison Camp

The FPC is located at Nellis Air Force Base and within an area of the base known as Area II. Nellis Air Force Base is located adjacent to and east of the City of North Las Vegas, approximately eight miles north of the center of the City of Las Vegas in Clark County, Nevada (Exhibit I-3). Area II is located within the northeastern portion of the base with the FPC itself bounded on the north and east by Grand Forks Avenue, on the west by First Street, and on the south by the "Red Horse" complex and Bergstrom Street, an area of approximately 33 acres. Access to the site of the FPC is via Las Vegas Boulevard and the Area II Gate. From the Area II Gate, access to the FPC is via Seymour Johnson Avenue. Established in December 1989, the FPC operates independently and has a rated capacity of approximately 750 beds.

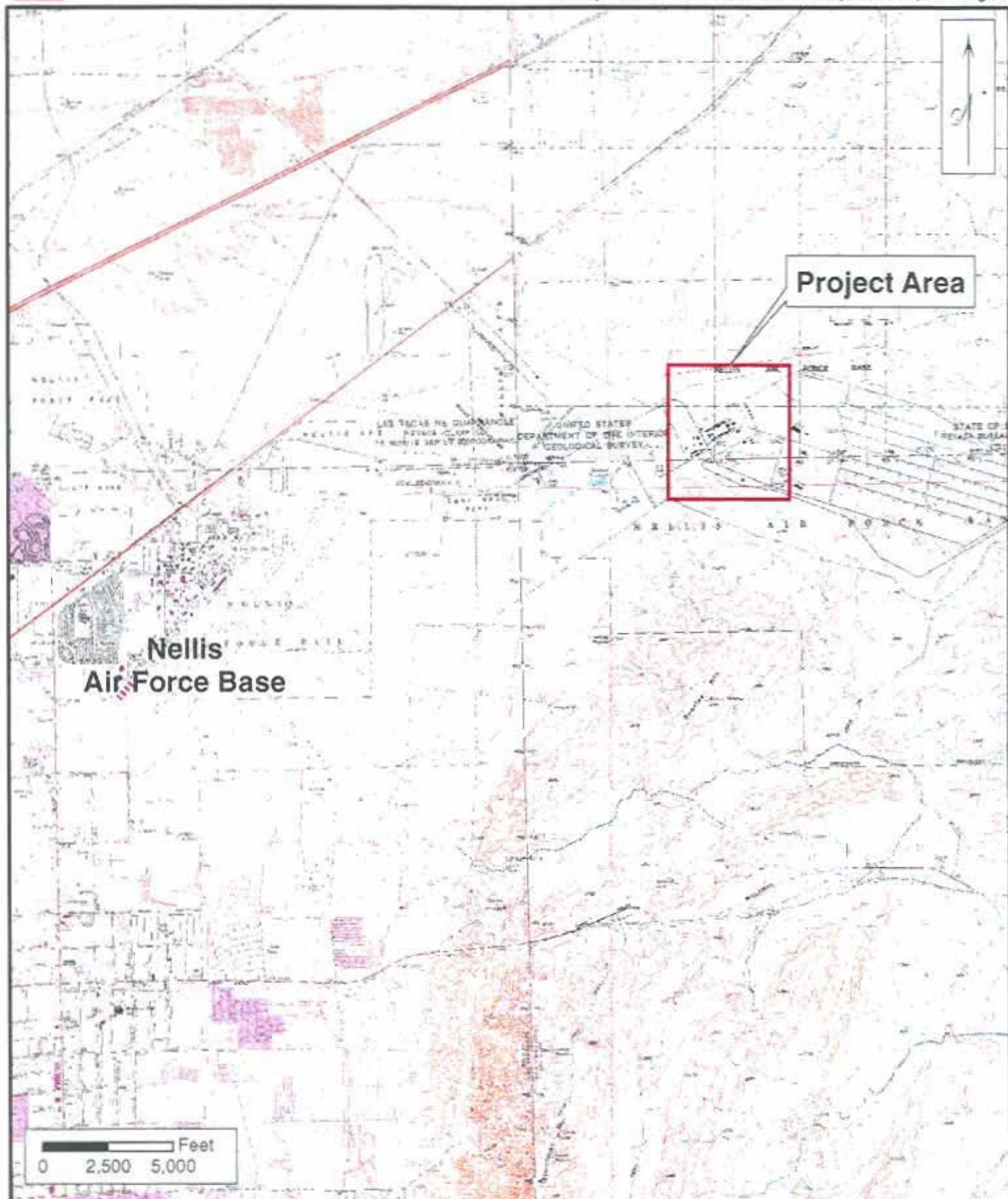
3. Inmate Programs

All inmates receive program and work assignments which are periodically reviewed and changed, if necessary, through inmate unit team consultation. All medically-able inmates are required to work at productive jobs and may involve work assignments in food service, the business office, carpentry and electrical maintenance, or any other activity necessary for the upkeep and operation of the facility.



The Louis Berger Group, Inc.

Source: USGS 7.5 Minute Topographic Maps, Las Vegas NE Valley, Frenchman Mountain, and Apex, NV quadrangles.



SITE LOCATION MAP

Exhibit I-3

In addition to routine inmate work assignments at the FPC, the BOP provides inmate labor in support of the maintenance of Nellis Air Force Base. FPC inmates provide an auxiliary workforce to the U.S. Air Force to reduce operational costs and to develop work skills and positive work habits for the inmates. On average, over 200 inmates participated daily as part of various base maintenance activities. In addition, the FPC provides general janitorial labor to the Community Service Project.

The proposed deactivation and closure of the FPC, therefore, has the potential to affect U.S. Air Force activities and operations at Nellis Air Force Base by eliminating access to the large workforce of minimum-security federal inmates for base maintenance. In order to continue to provide base support and maintenance, the U.S. Air Force intends to arrange for private contractors to undertake the maintenance and other tasks currently carried out by FPC inmates. No disruption of base operations are anticipated under this proposed arrangement.

4. Need for the Proposed Action

FPC Nellis Air Force Base is one of four stand-alone facilities proposed for deactivation and closure; others are located in Pennsylvania, Florida, and North Carolina. (In accordance with BOP NEPA regulations, Environmental Assessments are being prepared for each such proposal.) Deactivating and closing older, more costly, and/or less efficient stand-alone institutions would enable the BOP to more efficiently and effectively manage minimum-security beds throughout the federal prison system, particularly beds available in satellite minimum-security work camps that are located adjacent to larger, more secure federal correctional facilities, and to achieve substantial cost reductions.

Stand-alone FPCs, such as FPC Nellis Air Force Base, have relatively high operating costs because such facilities cannot take full advantage of shared services possible at multi-facility locations, such as medical services, food services, and administrative functions. By transferring inmates from FPC Nellis Air Force Base to minimum-security satellite work camps that are adjacent to other existing federal correctional facilities, the BOP can house inmates in a more cost-effective manner. Qualified FPC staff would have the opportunity to transfer to other BOP facilities where the need for staff exists. Other federal correctional facilities located in relative proximity to FPC Nellis Air Force Base include the four facilities located at the Federal Correctional Complex in Victorville, California; FCI Herlong, California; USP Atwater, California; FCI Phoenix, Arizona; USP Tucson and FCI Tucson, Arizona among others.

Closing the FPC and transferring inmates and staff to other facilities would allow the BOP to avoid the cost of essential infrastructure upgrades required over the next several years in order to continue to operate the camp.

II. ALTERNATIVES

II. ALTERNATIVES

Guidelines for the preparation of environmental studies for federal projects or actions such as that proposed by the BOP and discussed in Chapter I of this report require an investigation and evaluation of alternatives. The alternatives analysis conducted under these guidelines address the following cases:

- **No Action Alternative.** Implementation of this alternative would preclude the BOP from proceeding with the deactivation and closure of FPC Nellis Air Force Base.
- **FPC Deactivation and Closure Alternative.** Implementation of this alternative would allow the BOP to reduce operating costs by deactivating and closing an inefficient stand-alone FPC. Deactivation and closure of the FPC is considered by the BOP to be the Preferred Alternative.

No reasonable alternatives outside the jurisdiction of the Federal Bureau of Prisons (the lead agency) have been identified or warrant inclusion in the EA.

A. NO ACTION ALTERNATIVE

The No Action Alternative is defined as a decision by the BOP not to proceed with the proposed deactivation and closure of FPC Nellis Air Force Base. Instead, under this alternative, the BOP would continue to operate the FPC as a stand-alone facility and in the current inefficient and costly manner.

Adoption of the No Action Alternative would avoid the potential direct impacts (albeit temporary) associated with deactivation and closure of the FPC. The BOP anticipates that potentially significant adverse direct impacts from FPC deactivation and closure can and would be avoided and that none of the potential direct impacts associated with this alternative, properly managed and mitigated, would constitute significant adverse impacts as defined by NEPA.

The No Action Alternative would also avoid the permanent indirect impacts associated with transferring BOP staff and inmates to other existing federal correctional facilities. While the inmate population and staff complement is substantially less today than at its peak (approximately 92 staff and 700 inmates in early 2005 and approximately 37 staff and 225 inmates today), the transfer of staff and inmates to other federal correctional facilities can be disruptive to staff members and their families as well as inmates and their families. There are several federal correctional facilities in relative proximity to the FPC including the four facilities located at the Federal Correctional Complex in Victorville, California (approximately 211 miles); FCI Herlong, California (approximately 517 miles) among other facilities in California and Arizona. It is possible that disruptions to life styles and established patterns of living could occur to those directly affected. However, the BOP is committed to accommodating FPC staff in positions available at other existing facilities. While such a commitment may not fully mitigate the potential impacts and inconveniences to staff resulting from FPC closure, the more serious impact associated with eliminating staff employment would be avoided.

The No Action Alternative would also avoid the potential impacts associated with reductions in the demand for utility services arising at the FPC. However, water supply and wastewater treatment services are provided by the U.S. Air Force from on-base systems with no significant adverse impacts anticipated. Impacts to providers of electric power, natural gas, and solid waste collection are not expected to be significant or pose significant adverse impacts to providers of these services. Reuse of the FPC buildings and grounds by the U.S. Air Force should also offset any reductions in utility system use.

The BOP anticipates that potentially significant adverse indirect impacts from FPC deactivation and closure can and would be avoided and that none of the potential impacts associated with closure, properly mitigated, would constitute significant adverse impacts as defined by NEPA.

Adoption of the No Action Alternative, however, would result in the loss of the substantial positive benefits associated with the proposed action. Deactivating and closing this FPC would also allow the BOP to avoid essential infrastructure upgrades required over the next several years in order to continue to operate the camp. More efficient operation of the federal prison system, as well as substantial cost reductions, would not be achievable under the No Action Alternative.

The No Action Alternative, by definition, does not meet the purpose and need for the proposed action and, therefore, does not address the BOP's need to implement measures to house the growing federal inmate population in an efficient and cost-effective manner. However, in order to compare and contrast the potential impacts of the proposed action, the No Action Alternative is carried forward and discussed in Chapter IV of the EA.

B. FPC DEACTIVATION AND CLOSURE ALTERNATIVE

FPC Nellis Air Force Base is one of four stand-alone facilities proposed for deactivation and closure; others are located in Pennsylvania, Florida, and North Carolina. Deactivating and closing less efficient stand-alone institutions would enable the BOP to more efficiently and effectively manage minimum-security beds throughout the federal prison system, particularly beds available in satellite minimum-security work camps that are located adjacent to larger, more secure federal correctional facilities.

Stand-alone FPCs, such as FPC Nellis Air Force Base, have relatively higher operating costs because such facilities cannot take full advantage of shared services possible at multi-facility locations, such as medical services, food services, and administrative functions. By transferring inmates from FPC Nellis Air Force Base to minimum-security satellite work camps that are adjacent to other existing federal correctional facilities. Opportunities exist for FPC Nellis staff to relocate to other BOP facilities, should those staff wish to take advantage of such opportunities. Other federal correctional facilities in relative proximity to FPC Nellis Air Force Base include the four facilities located at the Federal Correctional Complex in Victorville, California; FCI Herlong, California; USP Atwater, California; FCI Phoenix, Arizona; USP Tucson and FCI Tucson, Arizona among others.

Deactivating and closing this FPC would also allow the BOP to avoid the cost of essential infrastructure upgrades required over the next several years in order to continue to operate the camp. Current FPC inmates would be relocated to other facilities which are less costly to operate while staff from the camp would be assimilated into other BOP facilities without a loss of employment. As a result of the proposed action, the BOP expects to operate more efficiently and to achieve substantial cost savings. Following deactivation and closure, the grounds and all standing buildings comprising the FPC would be vacated and returned to the U.S. Air Force as mutually agreed upon by the BOP.

The proposed deactivation and closure of the FPC, therefore, has the potential to affect U.S. Air Force activities and operations at Nellis Air Force Base by eliminating access to the large workforce of minimum-security federal inmates for maintenance and support of base operations. In order to continue to provide base support and maintenance, the U.S. Air Force intends to arrange for private contractors to undertake the maintenance and other tasks currently carried out by FPC inmates. No disruption to base operations is anticipated under this proposed arrangement.

Deactivation and closure of the FPC at Nellis Air Force Base is considered by the BOP to be the Preferred Alternative.

III. AFFECTED ENVIRONMENT

III. AFFECTED ENVIRONMENT

This chapter of the EA describes existing conditions in the potentially affected environment, i.e., that portion of the environment potentially impacted by the proposed action. The boundaries of the potentially affected environment will vary according to the nature of the potential impact and the aspect of the environment under consideration. Certain potential impacts (e.g., impacts on topography or drainage patterns) are highly site-specific and are likely to be contained entirely within the project area. Other impacts (e.g., potential social or economic impacts) may have an effect on the surrounding community.

Section III.A describes characteristics of the site of the proposed action and its immediate environs, i.e., topography, biological resources, cultural resources and other site-specific factors. Section III.B presents the socioeconomic, community and regional characteristics of the potentially affected environment, i.e., the regional economy, demographic characteristics, community services, surrounding land uses and other contextual characteristics. Potential impacts and actions to mitigate any potentially significant adverse impacts are discussed in Section IV following the same order and enumeration pattern.

A. SITE CHARACTERISTICS

1. Topography

Nellis Air Force Base is situated in the Basin and Range physiographic province, which is characterized by numerous elongated mountain ranges separated by similarly shaped valleys (basins). The difference in elevations between mountaintops and adjacent valley bottoms is generally no more than 3,000 to 5,000 feet.

Las Vegas Valley runs northwest to southeast through the area ending just beyond the city of Henderson (about 10 miles west of Hoover Dam). The broad portion of the valley is known locally as the Las Vegas Basin and Nellis Air Force Base is situated within the Las Vegas Basin portion of Las Vegas Valley. Topography is characterized primarily by flat alluvial deposits within the valley surrounded by numerous mountains and ranges in all directions. To the north (the Desert, Sheep and Las Vegas ranges) and east (the Black, Frenchman and Muddy mountains) they are generally north-south trending ranges. To the west (Spring Mountains) and south (El Dorado Mountains and McCullough Range) the mountains are less linear and not as consistently aligned.

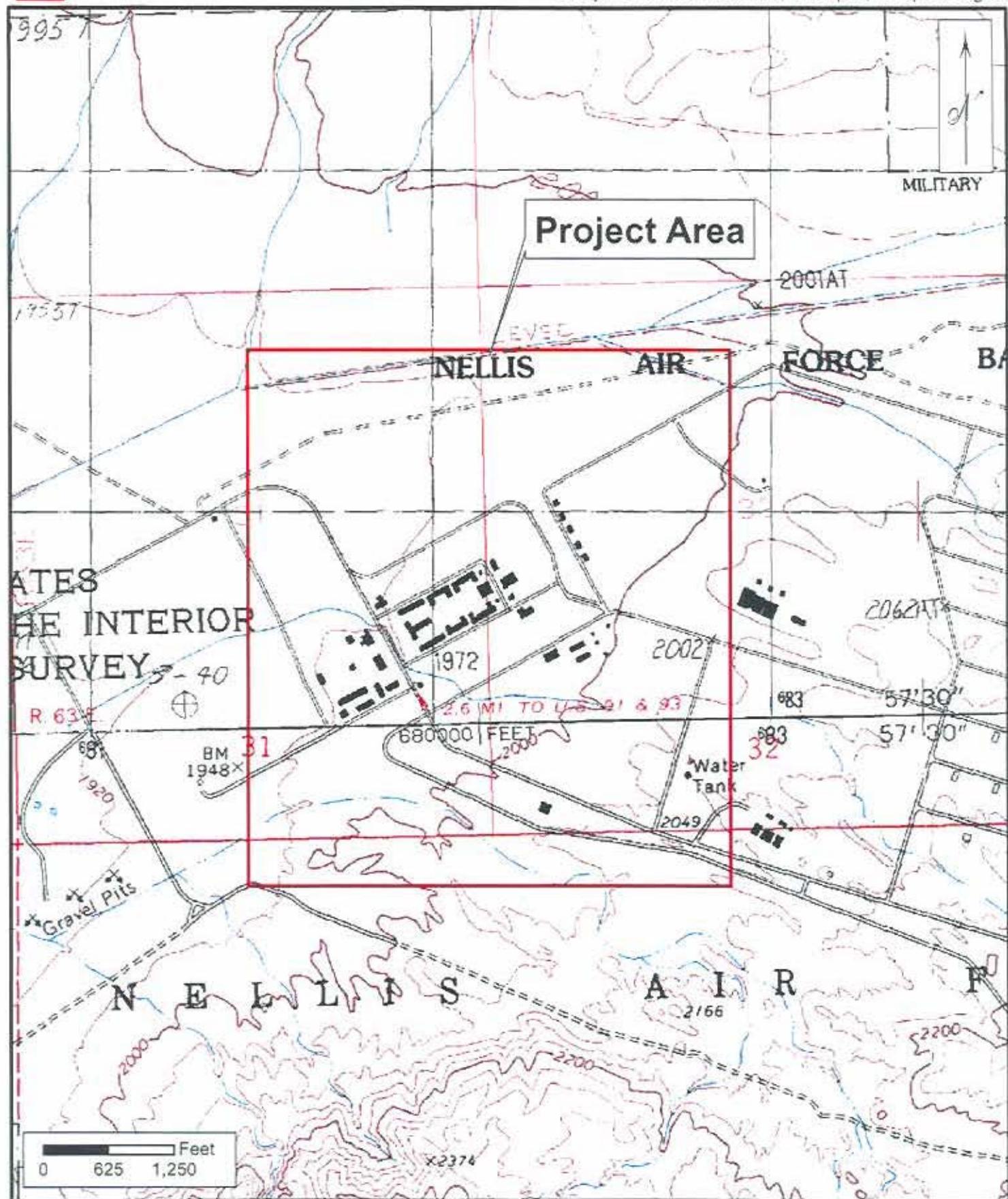
Topography within much of Nellis Air Force Base is relatively flat, with slopes one percent or less found over much of the base. Elevations range to nearly 2,500 feet above mean sea level (msl) in the foothills within the east portion of Area II (the area within which the FPC is located). Within Areas I and III, elevations range from approximately 1,980 feet above msl at the northwest corner of the base in Area III to approximately 1,780 feet above msl in the southernmost part of the base in Area I over a distance of approximately 3.5 miles (U.S. Geological Survey, 1973).

The site of the FPC lies within this topographic context. The property comprising the FPC is virtually flat, at an elevation of approximately 1,995 feet above msl, with a slight slope that facilitates drainage (Exhibit III-1). There are no unusual or unique topographic features or characteristics found within the site of the FPC.



The Louis Berger Group, Inc.

Source: USGS 7.5 Minute Topographic Maps, Las Vegas NE, Valley, Frenchman Mountain, and Apex, NV quadrangles.



SITE TOPOGRAPHY

Exhibit III-1

2. Geology

Nellis Air Force Base is situated in the Basin and Range physiographic province, which is characterized by recent fault movement (since the Oligocene, within the last 33 million years) forming numerous elongated mountain ranges separated by similarly shaped valleys (basins). Much of the drainage within this province is interior, so playa formation is common.

Two primary types of bedrock geology underlie the mountains surrounding the Las Vegas Valley. These are either older sedimentary rocks (from the Paleozoic Era) or younger igneous rocks, which include both volcanic and, to a lesser extent, plutonic rocks (all from the early Cenozoic Era). The sedimentary rocks are predominantly carbonates (limestone and dolomite), although there are also clastic formations (sandstone and shale) and some quartzite (metamorphosed sandstone). The mountains to the west (Spring Mountains), north (Desert, Sheep and Las Vegas ranges), and east (Frenchman and Muddy mountains) are comprised of these sedimentary rock formations. The igneous rocks primarily include basalts and other undifferentiated volcanic rocks, and smaller occurrences of intrusive rocks (granite, quartz monzonite, and granodiorite), rhyolite, and other undifferentiated rock types. Mountains to the south (McCullough Range and El Dorado Mountains) and east (Black Mountains) of the valley are comprised of volcanic rocks, while the plutonic rocks also are exposed at a number of locations in the southern mountains (Longwell, et al., 1965).

The Las Vegas Valley is structural in origin and has a considerable accumulation of Quarternary alluvium derived from the surrounding mountains and transported to the valley. Coarse material has been deposited closest to the mountain fronts in alluvial fans, while the finer particles have reached the valley bottoms where they were deposited in alluvial flood plain and lacustrine environments (Longwell, et al., 1965; Nellis Air Force Base, 2001). The Spring Mountains are the dominant source of detritus to the valley fill sediments in the Las Vegas Valley. The alluvial sediments generally become finer grained from west to east within the valley. These valley fill deposits are estimated to range from 2,000 to 5,000 feet thick beneath Nellis Air Force Base (Black and Veatch, 2001).

Nellis Air Force Base is situated in Seismic Hazard Zone 2B (International Conference of Building Officials, 1997). Potential earthquakes in this zone have been correlated to a modified Mercalli intensity (MMI) level value of VII (Lindeburg and Baradar, 2001). Thus, areas designated in Seismic Hazard Zone 2B could experience earthquakes with intensities of MMI Level VII. Typical results of a Level VII earthquake are considered to have strong shaking severity with people having difficulty standing; drivers feel their cars shaking; some furniture breaking; and loose bricks falling from buildings, the damage being slight to moderate in well-built buildings and considerable in poorly-built buildings (Louie, 1996).

3. Soils

The U.S. Department of Agriculture (USDA) has mapped the soils of the developed portions of Nellis Air Force Base. The general map combines multiple soil types and distinguishes between different map units based on soils, relief and drainage. In this system, soils underlying the area comprising the FPC fall within one soil map unit; the Glencarb map unit.

Glencarb soil is a very deep, well-drained soil on recent alluvial flats. It is formed in alluvium derived from various kinds of rocks. Permeability is moderately slow (0.2 to 2.0 inches per hour); available water capacity is high. Runoff is slow, and the hazard of water erosion is slight, but the hazard of blowing soil is high. The corrosion risk to uncoated steel/concrete is moderate to high and the shrink-swell potential is low to moderate. The main limitation for this soil for construction is hazard for flooding; it is subject to rare periods of flooding from prolonged, high-intensity storms. Glencarb soils are used for urban development and as a habitat for desert wildlife.

4. Hydrology

a. Surface Hydrology

Surface water in the Las Vegas Valley drains to the Las Vegas Wash, which is the primary water course in the area and eventually makes its way to the Colorado River. Surface water drainage on base generally flows to Clark County Regional Flood Control District channels where it is routed into the Las Vegas Wash. The Las Vegas Wash historically connected directly to the Colorado River, but today it is channeled underneath Lake Las Vegas near the Lake Mead National Recreation Area. On the far side of the Lake Las Vegas development, the Wash comes back to the surface from beneath the lake and flows approximately 3,000 feet to its discharge point into Lake Mead.

There are no permanent surface water bodies located within the site of the FPC and there is no history of flooding in the area of the FPC property. Federal Flood Insurance Administration maps (prepared by the Federal Emergency Management Agency) indicate that the tract comprising the FPC and adjoining areas lie outside the 100-year and 500-year flood zones and within an area of minimal flooding (Exhibit III-2). Surface drainage in and around the site of the FPC is facilitated by open drainageways which are part of a stormwater system which drains the developed areas of Nellis Air Force Base.

b. Subsurface Hydrology

Nellis Air Force Base is situated on the eastern side of Las Vegas Valley. Although this is a structurally formed basin, the Las Vegas Valley is filled with a considerable volume of alluvial sediments. This sediment volume and thickness has allowed a substantial groundwater reservoir (aquifer) to accumulate, which has historically provided a significant portion of the water supply for the City of Las Vegas and the surrounding communities. Groundwater currently accounts for about 29 percent of the water supply for Nellis Air Force Base (Nellis Air Force Base, 2001).

The primary water supply aquifer is situated at depths of at least 100 feet below ground surface (bgs) and increases to more than 1,200 feet bgs. The gradient of the upper surface of the primary aquifer (the water table) generally slopes downward toward the east; the groundwater flow within Las Vegas Valley is generally from west to east. The nature of the current climate (arid) and the composition of the underlying sediments (from carbonate rock sources) combine to promote the formation of a shallow hardpan layer within depths of up to 20 feet bgs.

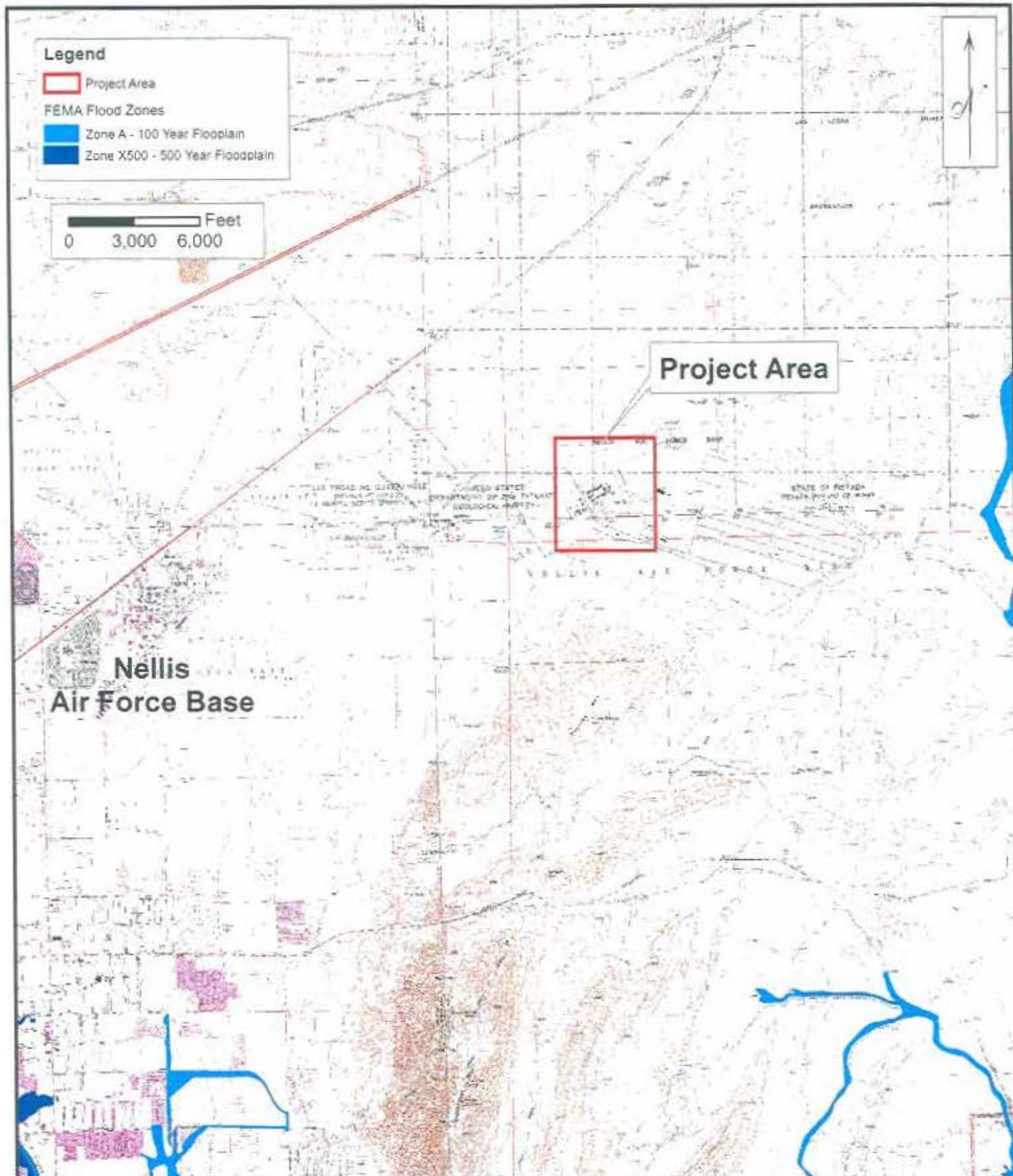
5. Biological Resources

Biological resources include the native and introduced plants and animals in the project area. For discussion purposes, these resources have been separated into the following sections: vegetation, wildlife, and special status species.



The Louis Berger Group, Inc.

Source: USGS 7.5 Minute Topographic Maps, Las Vegas NE, Valley, Frenchman Mountain, and Apex, NV quadrangles.
Flood Data: FEMA Q3 Flood Data.



a. Vegetation

According to the Integrated Natural Resources Plan (INRMP) for Nellis Air Force Base, native base vegetation can be categorized as a creosote bush-white bursage (*Larrea tridentata-Ambrosia dumosa*) vegetative community (Vasek and Barbour, 1997). This vegetative community is supported by the valley floor of the Mojave Desert and occurs from sea level to approximately 3,900 feet above msl. Although the majority of the base (including the site of the FPC) is developed, the creosote bush-white bursage community can be found in the undisturbed areas. This plant community can contain, but is not limited to, saltbush (*Atriplex spp.*), prickly pears and chollas (*Opuntia sp.*), Joshua tree (*Yucca brevifolia*), Russian thistle (*Salsola kalt*), desert trumpet (*Eriogonum inflatum*), cheesebush (*Hymenoclea salsola*), and ephedras (*Ephedra sp.*).

Approximately 1,000 acres of the base have been developed. Vegetation in much of this area, including the area of the FPC, consists of turf grasses, ornamental shrubs, and shade trees typical of landscaped areas. Lawn areas within the base are composed of Kentucky bluegrass (*Poa pratensis*), Italian domestic rye grass (*Lotium perenne var. multiflorum*), and creeping red fescue (*Festuca rubra [fallax]*). A variety of introduced and native deciduous trees, deciduous shrubs, evergreen trees, evergreen shrubs, perennials, and annuals are also used for landscaping on the base.

Based upon *The Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al., 1979), no wetland areas were identified during field visits of the FPC grounds. In addition, according to the National Wetland Inventory maps, no wetland areas are located within the immediate vicinity of the FPC.

b. Wildlife

Few species of native wildlife are found on the developed portions of Nellis Air Force Base due to the lack of suitable habitat. The species that do occur have adapted to the highly urbanized environment. However, the undisturbed portions of the base provide suitable habitat to a diverse desert fauna.

Reptiles such as the side-blotched lizard (*Uta stansburiana*), zebra-tailed lizard (*Crotaphytus draconoides*), western whiptail (*Cnemidophorus tigris*), common king snake (*Lampropeltis getulus*), sidewinder (*Crotalus cerastes*), chuckwalla (*Sauromalus obesus*), banded gila monster (*Helodenna suspectorum cinctum*), and desert tortoise (*Gopherus agassizi*.) may be found in both the north and east undeveloped portions of Nellis Air Force Base. Birds, including the great tailed grackle (*Quiscalus major*), common rock dove (*Columba livia*), burrowing owl (*Athene cunicularia*), house sparrow (*Passer domesticus*), Costa's hummingbird (*Calypte costae*), roadrunner (*Geococcyx californicus*), phainopepla (*Phainopepla nitens*), and mourning dove (*Zenaida macroura*) can be found throughout the base, especially near the few areas of open water within the south portion. Mammals that can be found on both the north and east undeveloped portions of the base include pocket mouse species (*Chaetodipus spp.*), kangaroo rat species (*Dipodomys spp.*), jackrabbit (*Lepus californicus*), western cottontail (*Sylvilagus audubon*), kit fox (*Vulpes macrotis*), coyote (*Canis latrans*), and bobcat (*Lynx rufus*).

c. Special Status Species

According to the U.S. Fish and Wildlife Service (USFWS), the Desert Tortoise (*Gopherus agassizii*), which is listed as threatened, may occur in or near the vicinity of the FPC. In addition, the Nevada Department of Wildlife (NDW) has identified several wildlife species as potentially inhabiting habitats in the vicinity of Nellis Air Force Base including Desert Tortoise, Gila Monster, Peregrine Falcon, Prairie Falcon, Burrowing Owl, various bats, Desert Bighorn Sheep, and migratory birds (Loggerhead Shrike and Brewer's Sparrow). Correspondence from the USFWS and the NDW is included in Appendix A while a listing of rare species for Clark County, as provided by the Nevada Natural Heritage Program, is included as Appendix B.

It is apparent from field inspections of the area comprising the FPC that the property does not include habitat that would support these special status species. The highly developed nature of the FPC property, coupled with the unique habitat requirements of these species, ensures that human interaction and conflicts with these protected species does not occur. There is no indication that any special status species inhabit the area of the FPC and none were observed during recent field visits.

6. Cultural Resources

Cultural resources are defined as prehistoric or historic archaeological sites, buildings, structures, districts, artifacts, or other physical evidence of human activity considered to be important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. For ease of discussion, cultural resources have been divided into prehistoric and historic archaeological resources, historic buildings and structures, and traditional cultural resources (e.g., sacred or ceremonial sites).

Numerous laws and regulations require federal agencies to consider the effects of a Proposed Action on cultural resources. These laws and regulations stipulate a process for compliance, define the responsibilities of the federal agency proposing the action, and prescribe the relationships among other involved agencies (e.g., the State Historic Preservation Officer [SHPO] and the Advisory Council on Historic Preservation). The primary law governing the treatment of cultural resources is the National Historic Preservation Act (NHPA), which requires a federal agency to consider potential impacts on historic properties from any proposed undertaking.

Only those cultural resources determined to be significant under cultural resources legislation are subject to protection or consideration by a federal agency. Significant cultural resources, whether they be prehistoric, historic, or traditional in nature, are referred to as "historic properties."

a. Prehistoric and Historic Archaeological Resources

Nellis Air Force Base has been surveyed for prehistoric and historic archaeological resources. One archaeological site eligible for nomination to the National Register of Historic Places (National Register) has been identified within Nellis Air Force Base; this site is not within the area comprising the FPC. No other sites within Nellis Air Force Base have been determined to be eligible for nomination to the National Register. The SHPO has concurred that the final inventory and evaluation activities on Nellis Air Force Base have been completed. Based on these findings, prehistoric and historic archaeological resources are not a concern within the any of the on-base areas that could be affected by the proposed deactivation and closure of the FPC.

b. Historic Buildings and Structures

Nellis Air Force Base has been surveyed for historic buildings and structures. No historic properties eligible for nomination to the National Register were identified. The Nevada SHPO has concurred that the final inventory and evaluation activities on Nellis Air Force Base have been completed.

c. Traditional Resources

Nellis Air Force Base has been working with Native American groups to identify traditional cultural resources, sacred areas, or traditional use areas. The base continues to work with these groups to further identify these resources. To date, no known traditional cultural resources, sacred areas, or traditional use

areas have been identified on Nellis Air Force Base. Based on these findings, traditional cultural resources are not a concern within the area of the FPC.

7. Aesthetics

The visual environment of the Nellis Air Force Base is characteristic of an urban environment. There are areas of the base that have been intensively developed with roads, housing units, office buildings, runways and other support facilities and structures. Within the developed portion of the base, topography is relatively flat with no areas of topographic relief which offer visual interest. There are undeveloped areas of the base that do provide views of relatively undisturbed, natural desert vegetation and because these areas are relatively small, level and unobstructed, adjacent developed areas are readily visible.

The site of the FPC is visually and aesthetically part of Nellis Air Force Base in terms of building design and placements, massing, exterior facades, color and material selections, landscaping patterns, interconnecting walkways and roadways, etc. Structures comprising the FPC are largely concentrated within a relatively small area, the focus of which are the multi-story inmate housing units, along with adjoining low-rise buildings housing dining and food service, recreation, commissionary, maintenance, administration, etc.

The FPC itself is arranged a compact, campus-like setting which is compatible with adjoining and nearby U.S. Air Force uses. The terrain within the developed area of the FPC is also level as is surrounding areas. The scale and placement of the various structures comprising the FPC, along with internal walkways, parking lots, landscaping, etc., provide an atmosphere equivalent to a small college campus or similar educational facility (Exhibit III-3).

8. Fiscal Considerations

Fiscal considerations are those having to do with the public treasury or revenues. Potential fiscal impacts could, but do not always, include: removal of private property from the public tax rolls; acquisition of private property through the use of public funds; and other public expenditures related to a proposed action (e.g., utility connections, roadway improvements, etc.). Fiscal considerations of proposed federal projects or actions are of particular interest to local governments due to the possible tax revenue impacts and implications.

Nellis Air Force Base, including the tract comprising the FPC, has been owned by the Federal Government (i.e., public ownership) since 1942 and is tax exempt. The BOP established at FPC in Area II of Nellis Air Force Base in December 1989. Given the tax exempt status of the property comprising the FPC, there have been no property tax payments or other tax revenues realized by local or county governments from the FPC.

9. Hazardous Substances

Pursuant to Executive Order 12512, the BOP undertook preparation of a Real Property Survey, a copy of which is included within the Environmental Baseline Survey (Appendix C). All buildings comprising the FPC and identified in the Real Property Survey report are listed in Exhibit III-4. All hazardous waste activities associated with FPC operation, considered minor, are managed under the requisite U.S. Air Force permits and programs. The following details the classification of hazardous substances with additional information provided within the Environmental Baseline Survey attached (Appendix D).



VIEW OF FPC - NELLIS AIR FORCE BASE

EXHIBIT III-3

a. Lead-Based Paint and Asbestos-Containing Materials

Most of the buildings comprising the FPC were built during the time period when both lead-based paint and asbestos-containing materials were widely used. Site surveys and abatement have been done although these materials are still known to be present on site. The presence of these materials constitutes a Recognized Environmental Condition (REC).

b. Petroleum Storage

There are currently no underground storage tanks (UST) or aboveground storage tanks (AST) located on site. Three buildings (Nos. 10250, 10207, and 10236) did have USTs that were removed by the U.S. Air Force. According to a Clark County Health Department letter dated December 21, 1992, the county indicated that the "... Health Department will not require further remediation at this time."

c. Weapons Cleaning

There is no BOP record of any buildings being used for storage of weapons or ammunition. BOP representatives reported that all weapons and ammunition are kept within the Nellis Air Force Base armory. In addition, no cleaning of weapons occurs at the FPC.

d. Hazardous Wastes

The FPC maintains very little hazardous materials and thus generates little hazardous waste. The materials present include oils (primarily motor oil), antifreeze, paints, some lacquers, and glues (used in the hobby and craft shops). Hazardous wastes at the FPC are stored in 55-gallon drums contained in roofed and fenced enclosures located north of the Garage Building. Propane and compressed gas canisters are also stored in this area. The Garage Foreperson maintains a log of waste disposal. This report, from the first quarter of 2005, shows details for the Safety Kleen parts washer, antifreeze, battery, and paint waste streams. The Safety Kleen parts washer is a self-contained unit that is picked up and disposed of by Safety Kleen on a regular basis. Used motor vehicle batteries are returned to the vendor.

Any hazardous waste generated at the FPC is handled through the U.S. Air Force program. The U.S. Air Force reports that any such waste originating from the FPC in the past has been a very small contribution.

e. Universal Wastes and Special Wastes

Universal wastes include batteries and fluorescent bulbs, both of which are brought to the U.S. Air Force at the base by the BOP for recycling.

f. Medical Wastes

Medical and dental wastes are generated in the Health Services Building. Medical wastes include "red bag" waste (solid wastes generated during the course of medical practice, including e.g. absorbent tissues, bandages, tongue depressors, etc.) and "sharps" (e.g. needles, glass vials, and scalpels) and are transported off site by Republic Services. Republic Services collects medical waste from the FPC approximately every two weeks. Dental wastes, such as amalgam, silver cells, and lead bite wings, are collected from the FPC by the Nellis Air Force Base Medical Environmental Material Office for recycling.

g. Pesticides and Herbicides

Pesticides and herbicides used at the FPC include Atrazine, XL-2G, Round-Up, Marathon and Orthene. These products, available at local home improvement and gardening centers, are applied as needed using sprayers and spreaders. For such materials, the BOP maintains a Hazard Communication Program with Material Safety Data Sheets (MSDS) available for review throughout the FPC.

h. Underground Injection of Wastes

There are no underground injections at the FPC site.

i. Air Emissions

Air emissions permits are maintained by the U.S. Air Force in accordance with the terms of the Intergovernmental Service Agreement. During interviews with the U.S. Air Force's Air Permit program personnel and a review of U.S. Air Force files, it was determined that six boilers are listed on the current FPC permit:

- Building #10201, Education and Medical Services – Two Raypak Natural Gas Boilers
- Building #10203, Dormitory A - Two Raypak Natural Gas Boilers
- Building #10208, Carpentry Shop – with cyclone (this building is currently used as a dormitory)
- Building #10208, Dormitory B – Bryan Natural Gas Boiler

According to FPC personnel, all of these boilers have been removed and the buildings are now heated by natural gas. U.S. Air Force records indicate that three boilers will need to be added to their new permit, however, as stated above, the BOP indicates there are no current boilers at the FPC.

There is also a baghouse at the FPC. The location of the baghouse is listed as Building #10208 on the U.S. Air Force's records, but is actually Building #10207 (Equipment Storage/Carpentry Shop).

B. COMMUNITY AND REGIONAL CHARACTERISTICS

1. Population

The City of Las Vegas is part of the unincorporated Clark County, one of the fastest-growing areas in the country. Clark County is comprised of 1.7 million residents (over 70 percent of the state's population), and is the most populous of Nevada's 17 counties. Other nearby cities include North Las Vegas, Henderson, Boulder City, and Mesquite; nearby unincorporated areas within the Las Vegas Valley include Enterprise, Paradise, Spring Valley, and Sunrise Manor.

Nellis Air Force Base had a population of 8,896 in 2000, which represented approximately two percent of Las Vegas' population and one percent of Clark County's population. Clark County had an estimated 2004 population of 1,650,671 of which 534,847 (32.4 percent) were estimated to reside within the Las Vegas city limits (Exhibit III-5).

EXHIBIT III-4
FPC REAL PROPERTY SURVEY
NELLIS AIR FORCE BASE

Building Number	Year Built	Use
10190	1991	Greenhouse
10201	1954	Education, ISM/Medical/Pharmacy
10202	1954	Building C/RDAP
10203	1954	Building A (Inmate Housing)
10204	1954	Theater
10206	NA (Circa 1950s)	Dining Hall (a shared use facility with the USAF)
10207	1954	Equipment Storage; Carpenter Shop
10208	1954	Building B (Inmate Housing)
10213	NA (Recent)	Chapel
10214	NA (Circa 1950s)	Captain and Lieutenant's Offices
10235	NA (Recent)	Pool/Dressing Room
10236	NA	Gymnasium*
10237	1957	Commissary (a shared use facility with the USAF)
10238	1995-96	Misc. Recreation Facility/Gazebo
10240	1996	Garage/Welding Shop
10245	NA (Recent)	Administration Building
10247	1993	Warehouse
10250	1954	Visiting Area
10272	1996	Central Tool Room
10278	1997	CMS/Facility Maintenance
17001	NA (Recent)	Misc. Recreation Facility/Gazebo
17005	NA (Recent)	Misc. Recreation Facility/Weight Shed
17009	NA (Recent)	Native American Sweat Lodge

NA: Not available.

Source: Federal Bureau of Prisons and U.S. Air Force, 2005.

*Not formally under BOP jurisdiction.

EXHIBIT III-5
POPULATION TRENDS
NELLIS AFB, LAS VEGAS, CLARK COUNTY, AND NEVADA

Location	1990	2000	2004 (Estimate)
Nellis Air Force Base	8,377	8,896	Not Available
Las Vegas City	258,295	478,434	534,847
Clark County	741,759	1,375,765	1,650,671
State of Nevada	1,201,833	1,998,257	2,334,771

Source: U.S. Bureau of Census, 2000.

Clark County's population has been growing rapidly over the past 15 years. U.S. Census data indicate that from 1990 to 2000, the population of Clark County increased by an average of 8.5 percent annually, as did the population of Las Vegas. This compares to an average annual growth rate of 6.6 percent for the State of Nevada as a whole. In 1990, Clark County represented approximately 62 percent of the population of the state and by 2004, the county's share of the state's population had increased to approximately 71 percent. The Clark County Department of Advanced Planning has forecasted continued growth of the county's population rising to approximately 1,945,409 in 2010, 2,276,201 in 2020 and 2,603,885 in 2030. These growth projections assume the supporting expansions of city and county infrastructure and services and continuing growth in utility supply.

2. Economic Characteristics

Over 10,000 people are employed at Nellis Air Force Base of which approximately 7,500 are military personnel and 2,500 are civilian employees (Exhibit III-6). On average there are over 1,000 temporary duty personnel each day at the base and over 8,000 official visitors annually. According to the Las Vegas Chamber of Commerce, the annual operating budget for Nellis Air Force Base exceeds \$150 million and has a major impact on the local economy.

According to an economic report published in 2000, Nellis Air Force Base contributed a total impact of over \$750 million to the Gross Regional Product (GRP) of Nevada in 1998. Statewide, Nellis Air Force Base generated approximately 3,602 secondary jobs, or 0.4 secondary jobs for every direct job. In 1998, Nellis Air Force Base contributed 1.4 percent to the state's GRP, 0.9 percent of its personal income, and 1.1 percent of its total employment. In Clark County, the base contributed 2.1 percent to GRP, 1.3 percent to personal income, and 1.7 percent to total employment.

U.S. Department of Labor, Bureau of Labor Statistics data for July 2005 indicate that Las Vegas had an unemployment rate of approximately 4.5 percent. This was slightly higher than the unemployment rate of the county or state, which were 4.3 and 4.2 percent, respectively. Unemployment in Las Vegas, Clark County, and Nevada was substantially lower than the national average for July 2005 (approximately 5.0 percent). The importance of the gaming and hotel industry to the county's economy is evident in Exhibit III-7, which indicates that half of the top ten employers are major casino and hotel complexes located in downtown Las Vegas. The number one employer in the county is the Clark County School District, employing more than 30,000 persons.

EXHIBIT III-6 LABOR FORCE CHARACTERISTICS LAS VEGAS CITY, CLARK COUNTY, AND NEVADA

Characteristic	Las Vegas City	Clark County	State of Nevada
Labor Force	274,773	865,588	1,213,944
Number of Persons Employed	262,503	828,264	1,163,548
Number of Persons Unemployed	12,270	37,324	50,396
Unemployment Rate	4.5%	4.3%	4.2%

Source: U.S. Bureau of Labor Statistics, July 2005.

EXHIBIT III-7
TOP TEN EMPLOYERS - CLARK COUNTY, NEVADA

Rank	Name	Type of Business/Industry	Number of Employees
1	Clark County School District	Public Education	30,000 +
2	Nellis Air Force Base	Military	10,000-19,999
3	Clark County	Government	9,000 - 9,999
4	Bellagio Hotel and Casino	Hotels and Gaming	8,000 - 8,999
5	MGM Grand Hotel and Casino	Hotels and Gaming	7,000 - 7,999
6	Mandalay Bay Resort and Casino	Hotels and Gaming	7,000 - 7,999
7	Mirage Hotel and Casino	Hotels and Gaming	5,000 - 5,999
8	State of Nevada*	Government	5,000 - 5,999
9	Caesars Palace Hotel and Casino	Hotels and Gaming	4,000 - 4,999
10	Las Vegas Metropolitan Police	Public Service	4,000 - 4,999

* One of multiple sites.

Source: State of Nevada Department of Employment, Training, and Rehabilitation, 2005.

Median household income in Clark County is approximately \$45,607, while per capita personal income is approximately \$28,922. Taxable sales in Clark County for the fiscal year ending June 2003 were approximately \$24.54 billion.

3. Housing

Housing in Las Vegas is described as moderately expensive, with prices and home types varying widely. There are many houses for sale in the Las Vegas area, ranging from townhouses to four-bedroom ranch homes. According to Home Builders Research, Clark County had over 29,000 new home sales and over 64,000 resales in 2004. The 2004 median new home sales price was close to \$300,000, while the median resale price was approximately \$250,000. Selected statistics regarding the mix of housing types that were available in Clark County in July 2004 are provided in Exhibit III-8.

Selected housing characteristics for Las Vegas City, Clark County and Nevada in 2000 are depicted in Exhibit III-9. The percent of owner-occupied housing units does not vary greatly between the different levels of geography, the highest housing occupancy rate was found in the city, followed by the county, and the state. New housing construction in the state and county began to take off during the seventies, continuing through the 1990s. The city, however, lagged slightly behind the county and state; their housing boom began in the 1980s. The median number of rooms per housing unit was virtually the same for the city, county and state.

EXHIBIT III-8
HOUSING TYPES - CLARK COUNTY, NEVADA

Housing Type	Number of Units	Percent of Units	Percent Occupied
Single-Family Detached	381,275	56.44%	97.7%
2-, 3-, 4-Plexes	19,168	2.84%	93.8%
Mobile Homes	29,305	4.34%	93.0%
Apartments	168,076	24.87%	94.0%
Town Houses	28,684	4.25%	94.8%
Condominiums	49,050	7.26%	93.7%
Total	675,558	100.0%	94.5%

Source: Southern Nevada Consensus Housing Unit Estimate, July 2004.

4. Community Services

a. Police and Fire Protection

Police protection within Nellis Air Force Base is provided by U.S. Air Force security forces (the Security Forces Squadron) while law enforcement off the base in surrounding communities is provided by the various county Sheriff's Departments, the Nevada State Police, and municipal police departments. Individually and in concert, these law enforcement agencies provide ample police protection and coverage throughout the region. Nonetheless, BOP staff are equipped to handle virtually all emergency situations within the FPC. The BOP relies upon its well-trained and well-equipped workforce to ensure the security of all its institutions including FPC Nellis Air Force Base. In addition, it is the responsibility of the United States Marshals Service and the Federal Bureau of Investigation to assist the BOP, if necessary, in the event a federal inmate is reported missing.

Nellis Air Force Base also provides its own fire protection and has a mutual aid agreement with Clark County. The Civil Engineer Squadron provides structural fire protection and aircraft crash-fire-rescue, to Nellis Air Force Base military, dependents, retirees, civilians and temporary duty personnel. The BOP relies upon the U.S. Air Force to provide the first response to a fire emergency at the FPC. The Area II Fire Department provides first response the area of the FPC.

b. Public Education

The Clark County School District (CCSD) includes public elementary, middle and high schools, and ranks as the fifth largest school system in the nation. The CCSD, managed by a seven-member Board of Trustees, employs approximately 32,161 staff, including full-time, part-time, substitute, temporary and student employees, and operates 301 schools with an enrollment of over 280,800 students. The general operating fund budget for the 2004-2005 school year was \$1.6 billion, with a per pupil expenditure of approximately \$5,805.

Nellis Air Force Base also offers educational services at the Nellis Educational Center. All active-duty/retired service members, civil service/non-appropriated employees and their family members may participate in programs at the Center.

EXHIBIT III-9
SELECTED HOUSING CHARACTERISTICS
LAS VEGAS CITY, CLARK COUNTY, AND NEVADA

Characteristic	Las Vegas City	Clark County	Nevada
Housing Unit Occupancy Rate	92.7%	91.5%	90.8%
Owner-Occupied Housing Units*	59.1%	59.1%	60.9%
Renter-Occupied Housing Units*	40.9%	40.9%	30.1%
Year Structure Built**			
1999 to March 2000	5.5%	7.1%	6.1%
1995 to 1998	22.5%	23.0%	20.1%
1990 to 1994	20.9%	18.2%	16.2%
1980-1989	19.0%	20.6%	20.8%
1970-1979	13.2%	17.2%	19.3%
1960-1969	10.9%	8.6%	9.5%
1940-1959	7.4%	4.7%	6.3%
1939 or earlier	0.6%	0.5%	1.7%
Number of Rooms per Housing Unit**			
1	4.3%	3.5%	3.5%
2	6.5%	7.1%	6.8%
3	12.8%	12.7%	12.1%
4	15.8%	17.4%	17.1%
5	21.3%	21.1%	21.2%
6	18.2%	17.4%	18.0%
7	10.6%	10.4%	10.7%
8	5.7%	5.8%	6.0%
9 or more	4.7%	4.6%	4.7%
Median Number of Rooms per Housing Unit**	5.0	4.9	5.0

* Universe includes all occupied housing units.

** Universe includes all housing units (occupied and unoccupied).

Source: U.S. Bureau of Census, 2000.

c. Medical Facilities

The BOP relies upon the Mike O'Callaghan Hospital at Nellis Air Force Base to provide general and emergency medical services to inmates and employees (on the base, emergency services are available 24 hours per day). Several hospitals and medical clinics are also located in the vicinity of Nellis Air Force Base including: the Veterans Administration Ambulatory Care Center in Las Vegas, University Medical Center in Las Vegas, Summerlin Hospital Medical Center in Las Vegas, and the Sunrise Hospital and Medical Center in Las Vegas.

5. Land Use

The area comprising the FPC is wholly confined within Nellis Air Force Base and bordered by base-related uses of various types. Land uses found in the immediately vicinity of the site of the FPC include: offices and similar administrative uses, education and training facilities, open space, etc.

6. Utility Services

a. Water Supply

Nellis Air Force Base obtains its potable water supply from two main sources: nine base wells and the Southern Nevada Water Authority (SNWA). A small amount of water is also purchased from the City of North Las Vegas. Recent reports indicate that the base's average daily water demand ranges from approximately 1.6 million gallons per day (mgd) during the winter months to approximately 7.0 mgd during the summer months. The majority of the increase during the summer is attributed to irrigation. Water storage consists of 7.5 million gallons within both elevated and ground storage tanks. Water distribution lines are constructed of cast iron, asbestos cement, and polyvinyl chloride.

The FPC is provided with potable water by the U.S. Air Force via the supply and distribution system which serves the base. Recent average daily water consumption by FPC inmates and employees was reported to be approximately 2,588,500 gallons per month or 86,283 gallons per day (June 2005). There are no known limitations to the provision of potable water supply in the area of the FPC.

b. Wastewater Collection, Treatment and Disposal

Wastewater from Nellis Air Force Base, including the FPC, is discharged to the Clark County Water Reclamation District (CCWRD) for treatment at the wastewater treatment plant. The wastewater system on base includes 382,000 linear feet of gravity sewer mains and 12 sewage pumping stations. Piping consists of vitrified clay, concrete, and PVC. The base discharges approximately 1.5 million gallons per day (mgd) of wastewater to the CCWRD with domestic wastewater accounting for approximately 90 to 95 percent of the total discharge from the base. Wastewater from most of the base is discharged to a CCWRD line on Nellis Boulevard at Cheyenne Road.

Wastewater generated by operation of the FPC is conveyed for treatment via the U.S. Air Force collection system which serves the base. Recent average daily wastewater generation by FPC inmates and employees was reported to be approximately 2,070,700 gallons per month or 69,023 gallons per day (June 2005). There are no known limitations to the provision of wastewater collection and treatment service to the area of the FPC.

c. Energy

The electrical distribution system at Nellis Air Force Base consists of nine 12.47/7.2-kilovolt (kV) feeders. These feeders are supplied from a base-owned substation, which is itself supplied from a single 69-kV Nevada Power Company incoming primary feed. The power is drawn from the Hoover Dam power grid. The base's substation is adjacent to the North Gate at Las Vegas Boulevard. Power is distributed throughout the base via 545,000 linear feet of overhead cables and 441,000 linear feet of underground cables. The 69 kV primary power is transformed to 12.47 kV by two 33-megawatt (MW) transformers.

The electrical distribution system in the area comprising the FPC is both overhead and underground. The electrical distribution system on base is owned by the U.S. Air Force with the exception of the overhead portion of the system within Old Nellis Terrace, which is owned by the Nevada Power Company. There are no known limitations to the provision of natural gas service in the area of the FPC.

Natural gas is provided to Nellis Air Force Base by Southwest Gas Company via a high pressure transmission line at five locations along North Las Vegas Boulevard (State Highway 604). The main base has approximately 20 miles of gas mains/laterals with an additional 19.3 miles of lines found within the base housing areas. The gas distribution system on the base, owned and operated by the U.S. Air Force, is comprised of polyethylene lines. There are no known limitations to the provision of natural gas service at Nellis Air Force Base or in the area of the FPC.

d. Solid Waste

Operation of the FPC results in the generation of solid wastes. While wastes are collected from the FPC twice monthly by a private carrier (Silverstate Disposal), waste volumes are not recorded. The BOP also operates a recycling program at the FPC that separates some recyclable material from the overall solid waste stream. The approximate monthly volume of recyclable material is 1,000 pounds consisting of cardboard and wooden pallets. Operation of the FPC does not result in the production of hazardous wastes. Medical wastes are collected for disposal by Republic Services.

7. Transportation Systems

Regional access to Nellis Air Force Base is provided via a network of county, state, and federal highways. The general vicinity of the base can be reached by Interstate (I)-15 and U.S. Route 95, both found to the west. Primary public access to the FPC is readily afforded via the Nellis Air Force Base roadway network. Access to the site of the FPC is via Las Vegas Boulevard and the Area II Gate. From the Area II Gate, access to the FPC is via Seymour Johnson Avenue.

McCarren International Airport handles most commercial flight originating in southern Nevada and is located approximately 12 miles from Nellis Air Force Base in Las Vegas.

8. Meteorological Conditions

The climate of the Clark County region is characterized by low humidity, abundant sunshine, mild winters and hot dry summers. Due to the "rain shadow" effect of the Sierra Nevada and Spring Range to the west, moisture associated with storms originating in the Pacific Ocean rarely reaches the Las Vegas area, hence, average annual precipitation in the area is approximately four inches.

Winter rainfall is usually gentle and characterized by limited runoff on native soils. In summer and early fall, local thunderstorms with intense rainfall can cause flash floods. Winter and spring weather patterns typically

have west or northwest winds. Summer and early fall weather patterns may have south winds, which may bring moisture for thunderstorm development.

Dry air masses move over the area resulting in clear to partly cloudy skies with 85 percent sunshine in an average year. The arid climate of the area is characterized by warm, dry summers and cool winters. The hottest months of the year are July and August where daily temperatures rise to the low 100s and drop to the high 70s. During the winter months, daily highs seldom exceed 60 degrees F and freezing temperatures at night are not unusual although extremes of cold are rare. Temperatures range from an average daily minimum of 36 degrees F in February to an average daily maximum of 99 degrees F in July. The relative humidity in the area averages approximately 40 percent in the morning and decreases to an average daily low of approximately 21 percent in the late afternoon.

9. Air Quality

a. Overview

The U.S. Environmental Protection Agency (U.S. EPA) defines ambient air in CFR 40, Part 50, as "*that portion of the atmosphere, external to buildings, to which the general public has access.*" In compliance with the 1970 Clean Air Act (CAA) and the 1977 and 1990 Amendments (CAAA), the U.S. EPA has promulgated ambient air quality standards and regulations. The National Ambient Air Quality Standards (NAAQS) were enacted for the protection of the public health and welfare, allowing for an adequate margin of safety. To date, the U.S. EPA has established NAAQS for six criteria pollutants: carbon monoxide (CO), sulfur dioxide (SO₂), particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM₁₀), ozone (O₃), nitrogen dioxide (NO₂), and lead (Pb). The health and welfare effects of the criteria pollutants are listed in Exhibit III-10.

There are two types of standards: primary and secondary. Primary standards are designed to protect sensitive segments of the population from adverse health effects, with an adequate margin of safety, that may result from exposure to criteria pollutants. Secondary standards are designed to protect human health and welfare and, therefore, in some cases, are more stringent than the primary standards. Human welfare is considered to include the natural environment (vegetation) and the manmade environment (physical structures). Areas that are below the standards are in "attainment" while those that equal or exceed the standards are in "non-attainment."

b. Regulatory Responsibilities

Although the U.S. EPA has the ultimate responsibility for protecting air quality, each state and local government has the primary responsibility for air pollution prevention and control. The CAA requires that each state prepare and submit a plan (State Implementation Plan) describing how the state will attain and maintain air quality standards in non-attainment areas. In order for projects to comply with the CAA and the CAAA, they must conform with attainment plans documented in the State Implementation Plan. Air quality standards are enforced by the Clark County Department of Air Quality and Environmental Management (DAQEM) under the authority of the Clean Air Act.

EXHIBIT III-10

DESCRIPTION OF NAAQS CRITERIA POLLUTANTS

Sulfur Dioxide (SO₂): A toxic, colorless gas with a distinctly detectable odor and taste. Oxides of sulfur in the presence of water vapor, such as fog, may result in the formation of sulfuric acid mist. Human exposure to SO₂ can result in irritation to the respiratory system, which can cause both temporary and permanent damage. SO₂ exposure can cause leaf injury to plants and suppress plant growth and yield. SO₂ can also cause corrosive damage to many types of manmade materials.

Particulates (PM₁₀): The PM₁₀ standard refers to inhalable particulate matter, which is defined as particulate matter less than 10 microns (0.01 millimeter) in diameter. The prior standard for Total Suspended Particulates (TSP) referred to airborne particulates less than 100 microns in diameter. Particulates originate from a variety of natural and anthropogenic sources. Some predominant anthropogenic sources of particulates include combustion products (wood, coal and fossil fuels), automotive exhaust (particularly diesels), and windborne dust (fugitive dust) from construction activities, roadways and soil erosion. Human exposure to inhalable particulate matter affects the respiratory system and can increase the risk of cancer and heart attack. Small particulates affect visibility by scattering visible light and when combined with water vapor can create haze and smog.

Carbon Monoxide (CO): A colorless, odorless, tasteless and toxic gas formed through incomplete combustion of crude oil, fuel oil, natural gas, wood waste, gasoline and diesel fuel. Most combustion processes produce at least a small quantity of this gas, while motor vehicles constitute the largest single source. Human exposure to CO can cause serious health effects before exposure is ever detected by the human senses. The most serious health effect of CO results when inhaled CO enters the bloodstream and prevents oxygen from combining with hemoglobin, impeding the distribution of oxygen throughout the bloodstream. This process significantly reduces the ability of people to do manual tasks, such as walking.

Nitrogen Dioxide (NO₂): A reddish-brown gas with a highly detectable odor, which is highly corrosive and a strong oxidizing agent. Nitric oxide (NO) and nitrogen dioxide (NO₂) constitute what is commonly referred to as nitrogen oxides (NO_x). NO_x are formed by all combustion and certain chemical manufacturing operations. During combustion, nitrogen (N) combines with oxygen (O) to form NO. This combines with more oxygen to form NO₂. Under intense sunlight, NO₂ reacts with organic compounds to form photochemical oxidants. Oxidants have a significant effect on atmospheric chemistry and are gaseous air pollutants that are not emitted into the air directly. They are formed through complex chemical reactions which involve a mixture of NO_x and reactive hydrocarbons (HC) in the presence of strong sunlight. Human exposure to NO₂ can cause respiratory inflammation at high concentrations and respiratory irritation at lower concentrations. NO is not usually considered a health hazard. NO_x reduce visibility and contribute to haze. Exposure to NO_x can cause serious damage to plant tissues and deteriorate manmade materials.

Ozone (O₃): An oxidant that is a major component of urban smog. O₃ is a gas that is formed naturally at higher altitudes and protects the earth from harmful ultraviolet rays. At ground level, O₃ is a pollutant created by a combination of HC, NO_x and sunlight, through photochemistry. Ground-level O₃ is odorless and colorless, and is the predominant constituent of photochemical smog. Human exposure to O₃ can cause eye irritation at low concentration and respiratory irritation and inflammation at higher concentrations. Respiratory effects are most pronounced during strenuous activities. O₃ exposure will deteriorate manmade materials and reduce plant growth and yield.

Lead (Pb): Lead is in the atmosphere in the form of inhalable particulates. The major sources of atmospheric lead are motor vehicles and lead smelting operations. The U.S. EPA estimates that ambient concentrations have decreased dramatically in recent years (a drop of 70 percent since 1975) largely due to the decreasing use of leaded gasoline. Health effects from atmospheric lead occur through inhalation and consequent absorption into the bloodstream. Excessive lead accumulation causes lead poisoning with symptoms such as fatigue, cramps, loss of appetite, anemia, kidney disease, mental retardation, blindness and death.

Source: The Louis Berger Group, Inc., 2005.

c. Existing Air Quality

Nellis Air Force Base, including the site of the FPC, is located in the northeastern portion of the Las Vegas Valley. The closest DAQEM air quality monitoring station operating in the vicinity of Nellis Air Force Base is the Craig Road monitoring station, located at 4701 Mitchell Street. The Craig Road station monitors ozone, CO, PM₁₀, and PM_{2.5}. Exhibit III-11 presents a summary of the highest pollutant values recorded at this station for three recent years.

Clark County, including Nellis Air Force Base and the site of the FPC, is located in a non-attainment area for three criteria pollutants: CO, ozone, and PM₁₀.

10. Noise

a. Overview

Noise is traditionally defined as any unwanted sound. Magnitudes of sounds, whether wanted or unwanted, are usually described by sound pressure, i.e., a dynamic variation in atmospheric pressure. The human auditory system is sensitive to fluctuations in air pressure above and below the barometric static pressure. These fluctuations are defined as sound when the human ear is able to detect pressure changes within the audible frequency range.

Since the range of sound pressure varies greatly, a logarithmic scale is used to relate sound pressures to a common reference level and is represented as the decibel (dB). The decibel is the standard unit for sound measurement and represents acoustical energy present in the environment. Humans are capable of hearing only a limited frequency range of sound; generally, humans can hear frequencies ranging from 20 hertz (Hz, cycle per second) to 20,000 Hz; however, they do not hear all frequencies equally well. As a result, a frequency weighting, known as A-weighting, is commonly applied to the sound pressure level, which approximates the frequency response of the human ear by placing most emphasis on the frequency range of 1,000 to 5,000 Hz. Because this A-weighted scale closely describes the response of the human ear to sound, it is most commonly used in noise measurements. Exhibit III-12 provides examples of common sounds and noise levels expressed on the A-weighted decibel scale.

The sound level at a particular instant is not likely to be a good measure of noise levels that vary with time over a wide range, e.g., noise from vehicular movement. To better accommodate and assess the time-varying noise levels typically associated with traffic patterns, a time-averaged, single-number descriptor known as the "Level equivalent" (L_{eq}) is employed. The L_{eq} is expressed in dBA and represents the average energy content of sounds over a specified time period. It includes both steady background sounds and transient, short-term sounds. It represents the level of a steady sound which, when averaged over the sampling period, is equivalent in energy to the time-varying (fluctuating) sound level over the same period of time.

Noise may be more objectional at certain times. This has led to the development of a measure known as the Day-Night Average Sound Level (L_{dn} or L_{10}). L_{dn} or L_{10} is a 24-hour average sound level that includes a penalty (10 dB) to sound levels during the night (10:00 PM to 7:00 AM). This measurement is often used to determine community noise levels and is endorsed by such agencies as the U.S. EPA, the U.S. Department of Transportation, the U.S. Department of Housing and Urban Development, and the U.S. Department of Defense.

EXHIBIT III-11
AIR QUALITY MONITORING DATA - LAS VEGAS, NEVADA

Pollutant	Averaging Time	Federal Primary Standards	Maximum Concentrations (a)			Number of Days Exceeding Federal Standard (b)		
			2001	2002	2003	2001	2002	2003
Ozone	1 hour	0.12 ppm	0.102	0.097	0.111	0	0	0
	8 hours	0.08 ppm	0.078	0.089	0.089	0	1	1
Carbon Monoxide	1 hour	35 ppm	3.5	2.3	1.5	0	0	0
	8 hours	9 ppm	2.4	1.8	0.9	0	0	0
PM _{2.5}	24 hours	65 µg/m ³	25	53	47	0	0	0
	Annual	15 µg/m ³	12.0	13.0	13.0	0	0	0
PM ₁₀	24 hours	150 µg/m ³	151	535	230	0	3	1
	Annual	50 µg/m ³	43.0	50.3	45.8	0	0	0

Source: U.S. EPA Air Quality System Quick Look Report (APM450), 2003.

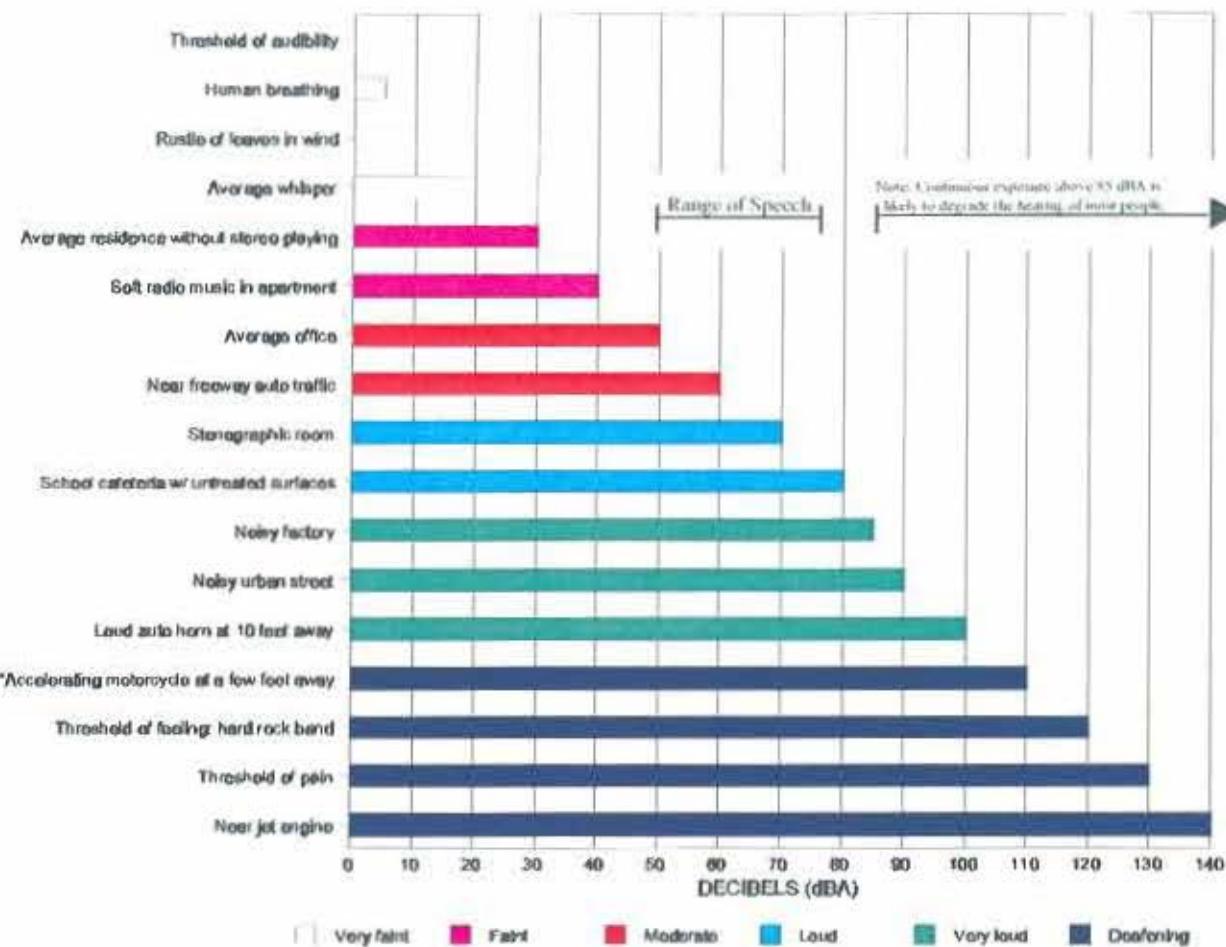
Notes:

- a Concentration units for CO and ozone are in ppm; Concentration units for PM_{2.5} and PM₁₀ are in µg/m³.
- b For annual standards, a value of 1 indicates that the standard has been exceeded.

b. Existing Noise Conditions

The FPC is located in the northeast portion of Nellis Air Force Base (Area II) with noise sources originating largely from motor vehicle traffic on nearby Seymour Johnson Avenue, bird and wildlife calls, and military aircraft training operations which utilize nearby taxiways and runways en route to the various training ranges. Observations in and around the FPC during recent field investigations reveal that noise levels are, for the most part, relatively low, due to a lack of nearby commercial or industrial development, major roadways, and other traditional noise sources.

As one would expect at an active U.S. Air Force installation, noise from aircraft-related activities are common, occurring at irregular intervals. However, such training activities do not hinder FPC operations. In addition, there are no land uses located near the FPC that would be considered sensitive noise receptors.



*Note: 50 feet from motorcycle equals noise at approximately 2,000 feet from a four-engine jet aircraft.

EXHIBIT III-12 COMMON SOUNDS EXPRESSED IN DECIBELS

Source: U.S. Department of Housing and Urban Development.

**IV. ENVIRONMENTAL CONSEQUENCES
IMPACTS AND MITIGATIONS**

IV. ENVIRONMENTAL CONSEQUENCES IMPACTS AND MITIGATION

The National Environmental Policy Act (NEPA) regulations direct federal agencies to discuss any direct and/or indirect, or cumulative adverse environmental effects which cannot be avoided should the proposed action be implemented, and the means to mitigate such adverse impacts if they occur. The NEPA regulations instruct federal agencies to consider both beneficial and adverse impacts of the proposed action in terms of public health, unique features of the geographic area, the precedential effect of the action, public opinion concerning the action, and the degree to which the impacts are uncertain. Mitigation measures are identified as those actions that would reduce or eliminate potential environmental impacts that could occur as a result of construction or operation of the proposed project. Mitigation, as defined by the NEPA regulations, includes:

- *"Avoiding the impact altogether by not taking a certain action or parts of an action";*
- *"Minimizing impacts by limiting the degree or magnitude of the action and its implementation";*
- *"Rectifying the impact by repairing, rehabilitating, or restoring the affected environment";*
- *"Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action"; and*
- *"Compensating for the impact by replacing or providing substitute resources or environments."*

Potential impacts and measures to mitigate potential adverse impacts associated with the proposed action are discussed under the same headings and in the same order as the preceding description of the potentially affected environment, i.e., first in terms of site characteristics and then in terms of community and regional characteristics.

A. SITE CHARACTERISTICS

1. Topography

a. Potential Impacts

Initial development of Nellis Air Force Base, including development of the area containing the FPC, altered the natural topography of the FPC site in order to establish level building sites, parking areas and recreational facilities; construct internal roadways; etc. As no ground-altering activities are proposed by the BOP, deactivation and closure of the FPC would not result in any direct impacts to current topographic conditions. Following deactivation and closure, the grounds and all standing buildings comprising the FPC would be vacated and returned to the U.S. Air Force by the BOP as mutually agreed upon.

b. Recommended Mitigation

No changes to current topographic conditions are anticipated as a result of the proposed action and no measures to mitigate potential topographic impacts resulting from the proposed action are warranted.

c. No Action Alternative

Under the No Action Alternative, the proposed action would not be implemented and the FPC would continue to operate in its current condition and location. Hence, impacts to topographic conditions would not occur and mitigation measures would not be required.

2. Geology

a. Potential Impacts

Initial development of Nellis Air Force Base, including development of the area containing the FPC, resulted in slight alterations to subsurface conditions during construction of camp buildings, installation of underground utilities, etc. As no ground-altering activities are proposed by the BOP, deactivation and closure of the FPC would not pose any direct impacts to geologic features and conditions. Following deactivation and closure, the grounds and all standing buildings comprising the FPC would be vacated and returned to the U.S. Air Force by the BOP as mutually agreed upon.

b. Recommended Mitigation

The proposed action would not adversely effect pre-existing geologic conditions at the site of the FPC. Hence, no mitigating measures involving geologic features and seismic conditions are warranted.

c. No Action Alternative

Under the No Action Alternative, the proposed action would not be implemented and the FPC would continue to operate in its current condition and location. Hence, impacts to geologic features and conditions would not occur and mitigation measures would not be required.

3. Soils

a. Potential Impacts

Native soils were largely altered as a result of construction activities involving Nellis Air Force Base in general, and the site of the FPC in particular, during construction of the buildings, parking areas, recreational facilities, etc. that comprise the FPC. As no ground-altering activities are proposed by the BOP, deactivation and closure of the FPC would pose no direct impact to soil conditions and characteristics. Following deactivation and closure, the grounds and all standing buildings comprising the FPC would be vacated and returned to the U.S. Air Force by the BOP as mutually agreed upon.

b. Recommended Mitigation

The proposed action would not adversely effect existing soil conditions or characteristics at the site of the FPC and, therefore, no other mitigating measures are warranted.

c. No Action Alternative

Under the No Action Alternative, the proposed action would not be implemented and the FPC would continue to operate in its current condition and location. Hence, impacts to soil conditions and characteristics would not occur and mitigation measures would not be required.

4. Hydrology

a. Potential Impacts

Initial development of Nellis Air Force Base, including development of the area containing the FPC, altered the area's natural hydrology by construction of buildings, roadways, parking areas, recreational facilities, stormwater management system, etc. At the present time, the U.S. Air Force properly handles stormwater originating in the area of the FPC and would continue to do so following FPC closure. The FPC is not located within a 100-year floodplain or within or adjacent to wetlands and, therefore, the proposed deactivation and closure of the FPC would not directly impact existing hydrologic conditions. As no ground-altering activities are proposed by the BOP, adverse impacts to hydrologic conditions are not expected to occur as a result of FPC deactivation and closure. Following deactivation and closure, the grounds and all standing buildings comprising the FPC would be vacated and returned to the U.S. Air Force by the BOP as mutually agreed upon.

b. Recommended Mitigation

The stormwater management system in place in and around the FPC directs runoff from the buildings, parking areas and driveways that comprise the FPC. No changes to the volume or quality of stormwater are expected following deactivation and closure and, therefore, no mitigating measures for hydrologic conditions are warranted.

c. No Action Alternative

Under the No Action Alternative, the proposed action would not be implemented and the FPC would continue to operate in its current condition and location. Hence, impacts to hydrologic conditions and characteristics would not occur and mitigation measures would not be required.

5. Biological Resources

a. Potential Impacts

Development of Nellis Air Force Base permanently altered the natural ecosystems in this area of Clark County. Within the base, the area comprising the FPC consists of largely cleared and developed lands, a lightly traveled road network, and numerous standing structures. The majority of the vegetation found within the area comprising the FPC consists of mowed turf and landscape plantings which are maintained on a regular basis.

Although the overall base incorporates natural desert habitats, the proposed deactivation and closure action would be confined to the FPC area, thereby avoiding direct or indirect impacts to any natural areas found nearby. No listed wildlife or plant species and/or their habitats nor any wetlands or surface water bodies would be adversely affected by the proposed deactivation and closure action.

As no ground-altering activities are proposed by the BOP, adverse impacts to biological resources are not expected to occur as a result of FPC deactivation and closure. Following deactivation and closure, the grounds and all standing buildings comprising the FPC would be vacated and returned to the U.S. Air Force by the BOP as mutually agreed upon.

b. Recommended Mitigation

No adverse impacts to biological resources are anticipated as a result of the proposed action and, therefore, no measures to mitigate potential biological impacts resulting from the proposed action are warranted.

c. No Action Alternative

Under the No Action Alternative, the proposed action would not be implemented and the FPC would continue to operate in its current condition and location. Impacts to biological resources would not occur under the No Action Alternative and mitigation measures would not be required.

6. Cultural Resources**a. Potential Impacts**

The FPC, located in the northeastern portion of the base, consists of administrative structures, inmate housing units (dormitories), and other related structures that date to the mid-1950s. Support structures (i.e., warehouse, greenhouse, Native American Sweat Lodge, and garage) date to the 1990s and later. While several of the structures comprising the FPC exceed 50 years in age, none appear eligible for listing individually in the National Register of Historic Places. In addition, the FPC does not meet criteria for listing in the National Register of Historic Places as an eligible historic district.

Adverse impacts to cultural resources are not expected to occur as a result of FPC deactivation and closure. Following discussions with U.S. Air Force representatives, the BOP will dismantle and remove the small greenhouse structure (Building 10190) and Native American Sweat Lodge (Building 17009) from the area of the FPC. In addition, the BOP is proposing to dismantle the warehouse building for use at another BOP institution. Each of these three structures are of modern construction and pose no adverse impacts to cultural resources. There are no FPC structures which exceed 50 years old which are proposed for dismantling or demolition by the BOP. Following deactivation and closure, the grounds and all standing buildings comprising the FPC would be vacated and returned to the U.S. Air Force by the BOP as mutually agreed upon.

b. Recommended Mitigation

Adverse impacts to cultural resources are not anticipated as a result of the proposed FPC deactivation and closure action and, therefore, no measures to mitigate potential impacts to cultural resources are warranted.

c. No Action Alternative

Under the No Action Alternative, the proposed action would not be implemented and the FPC would continue to operate in its current condition and location. Hence, impacts to cultural resources would not occur and mitigation measures would not be required.

7. Aesthetics**a. Potential Impacts**

Initial development of Nellis Air Force Base permanently altered the area's natural aesthetic qualities and characteristics by construction of buildings, roadways, runways, parking areas, utilities, etc. Development of the area containing the FPC further altered (albeit, slightly) the area's aesthetic and visual features by the installation of camp-related buildings, parking areas, recreational facilities, etc.

The proposed deactivation and closure action involves no building or ground-altering activities, therefore, potential adverse impacts to visual and aesthetic resources are not expected to occur. Following deactivation and closure, the grounds and all standing buildings comprising the FPC would be vacated and returned to the U.S. Air Force by the BOP as mutually agreed upon.

b. Recommended Mitigation

Adverse impacts to aesthetic and visual resources are not anticipated as a result of the proposed action. Therefore, no measures to mitigate potential aesthetic impacts resulting from the proposed deactivation and closure action are warranted.

c. No Action Alternative

Under the No Action Alternative, the proposed action would not be implemented and the FPC would continue to operate in its current condition and location. Hence, impacts to aesthetic and visual resources would not occur and mitigation measures would not be required.

8. Fiscal Considerations

a. Potential Impacts

The area comprising Nellis Air Force Base, including the area containing the FPC, has been under federal government ownership since the 1940s and, therefore, is exempt from real property taxation. The proposed deactivation and closure of the FPC would not alter the tax-exempt status of the property and there would be no net change in real property tax revenues resulting from the proposed action. Following deactivation and closure, the grounds and all standing buildings comprising the FPC would be vacated and returned to the U.S. Air Force by the BOP as mutually agreed upon.

b. Recommended Mitigation

Because no adverse impacts to property tax revenues are anticipated to result from implementation of the proposed FPC deactivation and closure, no mitigation measures are necessary.

c. No Action Alternative

Under the No Action Alternative, the proposed action would not be implemented and the FPC would continue to operate in its current condition and location. Hence, impacts to fiscal conditions would not occur and mitigation measures would not be required.

9. Hazardous Substances

a. Potential Impacts

Deactivation and closure of the FPC is not expected to pose adverse impacts to hazardous substances. With no significant building demolition or ground altering activities planned as part of the proposed action, deactivation and closure of the FPC is not expected to pose adverse impacts to hazardous substances. Following deactivation and closure, the grounds and all standing buildings would be vacated and returned to the U.S. Air Force in accordance with the terms and conditions of the agreement between the BOP and the U.S. Air Force.

b. Recommended Mitigation

Because no adverse impacts resulting from the use or generation and handling of hazardous substances is expected as a result of the proposed deactivation and closure of the FPC, no mitigation measures are warranted.

c. No Action Alternative

Under the No Action Alternative, the proposed action would not be implemented and the FPC would continue to operate in its current condition and location. Hence, impacts associated with hazardous substances would not occur and mitigation measures would not be required.

B. COMMUNITY AND REGIONAL CHARACTERISTICS**1. Population****a. Potential Impacts**

Following initial activation, the inmate population at the FPC increased steadily, reaching its peak in early 2005 when approximately 700 inmates were housed at the facility. During this period BOP employment steadily increased, reaching a peak in early 2005 when approximately 92 BOP employees were assigned to the facility. At the present time, approximately 37 employees are assigned to the FPC.

During the past 15 years, additional satellite camps were developed in California, Texas, Illinois, Kentucky, Virginia, West Virginia, North Carolina, Florida among others, increasing the number of beds available to the BOP to house minimum-security inmates. By implementing the proposed action, the BOP would cease operation of FPC Nellis Air Force Base, relocating minimum-security inmates to other existing federal correctional facilities with available capacity and transferring the approximately 37 employees currently staffing the facility to other federal correctional facilities where a need for staff exists.

Those employees to be transferred to other federal correctional facilities would likely face the necessity of relocating from their current place of residence. For those employees facing relocation out of Clark County area, some temporary demographic impacts would be anticipated with a slight reduction in the number of area residents. However, the small number of employees potentially affected (a maximum of 37) together with their spouses and/or other family members and the large population base comprising Clark County (approximately 1,650,000), should serve to minimize any potential impacts resulting from FPC deactivation and closure. No significant adverse impacts to area demographics are anticipated as a result of the proposed FPC deactivation and closure.

b. Recommended Mitigation

Because no significant adverse impacts to the area's population are anticipated to result from the proposed deactivation and closure action, no mitigation measures are warranted.

c. No Action Alternative

Under the No Action Alternative, the proposed action would not be implemented and the FPC would remain operational in its current condition and location. Hence, impacts to local and regional demographics would not occur and mitigation measures would not be required.

2. Economic Characteristics

a. Potential Impacts

FPC Nellis Air Force Base is among the BOP's few remaining stand-alone FPC facilities. Deactivating and closing older and/or less efficient stand-alone institutions would enable the BOP to more efficiently and effectively manage minimum-security beds throughout the federal prison system, particularly beds available in satellite minimum-security work camps that are located adjacent to larger, more secure federal correctional facilities.

In considering the possible deactivation and closure of the FPC, the BOP studied the cost associated with upgrading, replacing or otherwise repairing essential infrastructure systems serving the FPC. Recent BOP analyses show that the costs associated with asbestos and lead-based paint remediation and fire safety and other infrastructure upgrades to the FPC would require a cumulative investment of approximately \$6.1 million. Deactivating and closing this FPC would allow the BOP to avoid the substantial investment necessary to maintain operation of the FPC as well as for future improvements to camp buildings, life safety systems, and support facilities.

Closing the FPC and transferring inmates and staff to other existing satellite prison camps would permit shared services thereby reducing the costs to house minimum-security inmates. Stand-alone FPCs, such as FPC Nellis Air Force Base, have relatively high operating costs because such facilities cannot take full advantage of shared services possible at multi-facility locations, such as medical services, food services, and administrative functions. By transferring inmates from FPC Nellis Air Force Base to minimum-security satellite work camps that are adjacent to other existing federal correctional facilities, the BOP can house inmates in a more cost-effective manner. In addition, opportunities exist for FPC staff to relocate to other BOP facilities should those staff wish to take advantage of such opportunities. Other federal correctional facilities located closest to FPC Nellis Air Force Base include the three facilities located at the Federal Correctional Complex in Victorville, California; FCI Herlong, California; USP Atwater, California; FCI Phoenix, Arizona; USP Tucson and FCI Tucson, Arizona among others. In addition to the significant and recurring investment in infrastructure upgrades and the higher costs associated with operating a stand-alone FPC, the BOP also faces high daily operating costs that are associated with reliance upon utility systems and services available from the U.S. Air Force.

The one-time cost associated with FPC deactivation and closure is estimated at approximately \$3.0 million. However, following camp closure, the BOP would realize substantial annual cost savings. Within the first year following closing, the BOP would realize an approximate net cost savings of approximately \$7.3 million (\$10.3 million in savings reduced by \$3.0 million in closing costs). For the second year following camp closure, the BOP is projecting net cost savings of approximately \$10.6 million, rising to approximately \$10.9 million in year three (due to increased operating costs) and increasingly greater amounts in later years.

Contrasted against the beneficial cost savings to the BOP is the potential impact of FPC closing to the local and regional economy. Under a worst-case scenario, all 37 FPC employees and their families would relocate to other correctional facilities outside the southern Nevada region with the subsequent loss of the camp's annual payroll of approximately \$6.5 million in addition to approximately \$336,000 spent annually for public utility services and an additional \$2.5 million spent annually for supplies and services. The reduction in spending which the FPC annually contributes to the area's large and diverse economy through local purchases is not considered to be a significant impact.

b. Recommended Mitigation

Significant adverse impacts to the area economy are not anticipated to result from the proposed FPC deactivation and closure, hence, no mitigation measures are necessary.

c. No Action Alternative

Under the No Action Alternative, the proposed action would not be implemented and the FPC would remain operational in its current condition and location. Hence, impacts to the local and regional economy would not occur and mitigation measures would not be required.

3. Housing Characteristics**a. Potential Impacts**

At the present time, 37 employees are assigned to the FPC. A review of residency information has revealed that current employees reside throughout Clark County, representing a widespread distribution of employees and residences throughout the southern Nevada region.

By implementing the proposed action, the BOP would cease operation of FPC Nellis Air Force Base, relocating minimum-security inmates to other existing federal correctional facilities with available capacity and transferring staff to other facilities where a need for staff exists. Given the distances to other federal correctional facilities (approximately 211 miles to FCC Victorville, California and approximately 517 miles to FCI Herlong, California), relocation of BOP employees (who wish to relocate) from their current place of residence in Nevada is a certainty. As a result of employee relocation, potential impacts to local and regional housing markets are anticipated as additional units are added to the market for sale or rental housing. However, the small number of employees potentially affected (maximum of 40) and the large and fast growing population base comprising Clark County alone (approximately 1,650,000), should minimize the potential for adverse impacts. Significant adverse impacts to the local and regional housing markets are not anticipated as a result of the proposed FPC deactivation and closure.

b. Recommended Mitigation

While deactivation and closure of the FPC may pose slight impacts to local housing markets, significant adverse impacts are not anticipated as a result of the proposed action and no mitigating measures are warranted.

c. No Action Alternative

Under the No Action Alternative, the proposed action would not be implemented and the FPC would remain operational in its current condition and location. Hence, impacts to housing conditions and markets would not occur and mitigation measures would not be required.

4. Community Services**a. Potential Impacts**

Security and law enforcement within Nellis Air Force Base is the responsibility of the U.S. Air Force. Supplementing U.S. Air Force personnel are resources available from the BOP. BOP staff are responsible for responding to virtually all emergency situations at the camp. The BOP's well-trained and well-equipped workforce serves to ensure the security of all its institutions with little or no reliance on outside agencies or

resources. Beyond the confines of the base, law enforcement is provided by the Nevada State Police, Clark County Sheriff's Department, and the Las Vegas and North Las Vegas municipal police departments. Individually and in concert, these law enforcement agencies provide ample police protection and coverage throughout the region. Following deactivation and closure, the FPC would no longer house inmates and there would be no need to provide law enforcement support to the BOP. Therefore, the proposed deactivation and closure of the FPC should pose no adverse impacts upon law enforcement agencies serving the base or surrounding community.

The U.S. Air Force provides first response fire protection and emergency medical services throughout the base including the FPC and has in place mutual aid agreements with Las Vegas and Clark County. Following deactivation and closure, the FPC would no longer house inmates and there would be no need to provide fire protection or emergency medical services to federal inmates and BOP employees.

The relatively small number of BOP employees and families potentially affected by the proposed action should result in little or no impacts to public education, law enforcement, fire protection, and health care services provided in the cities of Las Vegas and North Las Vegas, Clark County, or the surrounding region. Significant long-term impacts to community services and facilities are not anticipated following deactivation and closure of the FPC. Following deactivation and closure, the grounds and all standing buildings comprising the FPC would be vacated and returned to the U.S. Air Force by the BOP as mutually agreed upon.

b. Recommended Mitigation

Since no significant adverse impacts to community services and facilities are anticipated as a result of the proposed action, no mitigating measures are warranted.

c. No Action Alternative

Under the No Action Alternative, the proposed action would not be implemented and the FPC would remain operational in its current condition and location. Hence, impacts to community services would not occur and mitigation measures would not be required.

5. Land Use

a. Potential Impacts

In 1989, the BOP established the FPC at Nellis Air Force Base by converting surplus buildings for use as a minimum-security camp. The present-day FPC comprises some 17 buildings comprising approximately 200,000 square feet of space, arranged within a 33-acre tract.

Initial development of FPC resulted in direct land use impacts by transforming a former undeveloped tract into an institutional use. The largely self-contained nature of the FPC, coupled with the distance between the facility and adjoining base facilities and activities, served to confine all potential direct land use impacts associated with camp development and operation to the FPC site with little or no impacts to adjoining land uses.

Following deactivation and closure, the BOP would relinquish all structures (with one exception) and the grounds comprising the FPC and return them to the U.S. Air Force as mutually agreed upon. It is expected that the U.S. Air Force would make use of the former FPC by adapting the administrative offices, housing units, dining hall and food service, commissary, garage, warehouse, storage and maintenance buildings, etc. for mission-related purposes. Building 10247 (Warehouse) would be dismantled by the BOP for transport

and installation at another BOP institution. In accordance with a request by the U.S. Air Force, Building 17009 (Native American Sweat Lodge) and Building 10190 (greenhouse) would also be dismantled and removed from the area.

FPC deactivation and closure are not expected to pose significant adverse impacts to adjoining land uses or the adversely influence the value or future use of neighboring private properties. With the proposed action confined to Nellis Air Force Base, potential impacts to off-base land uses would also be avoided. Therefore, adverse impacts to land uses resulting from the proposed action are not anticipated.

b. Recommended Mitigation

The proposed action is not expected to adversely affect land uses within Nellis Air Force Base. Since no significant adverse impacts to land uses are anticipated as a result of the proposed action, no mitigating measures are warranted.

c. No Action Alternative

Under the No Action Alternative, the proposed action would not be implemented and the FPC would remain operational in its current condition and location. Hence, impacts to land uses would not occur and mitigation measures would not be required.

6. Utility Services

a. Potential Impacts

Deactivation and closure of the FPC is not expected to pose adverse impacts to the provision of public utility services in the area. The BOP currently relies upon the U.S. Air Force for provision of potable water supply and wastewater treatment services. As a result of the proposed closure, the BOP would end its reliance upon these services.

Deactivation and closure of the FPC would also end the BOP's reliance upon public utility providers for electric power (Nevada Power Company), natural gas (Southwest Gas Company), and solid waste collection services (Silverstate Disposal). Deactivating and closing the FPC would result in reductions in revenues paid by the BOP to the various utility providers. However, the amount of revenue provided by the BOP is small when compared to revenues provided by all area customers. The reductions in revenue resulting from FPC closure are not expected to pose a significant adverse impact to utility providers. Deactivation and closure alone is also not expected to result in the generation of solid wastes. No solid wastes would be generated by the BOP following deactivation and closure.

Significant long-term impacts to utility services are not anticipated following deactivation and closure of the FPC.

b. Recommended Mitigation

With the U.S. Air Force responsible for water supply and wastewater collection and treatment services at the FPC, potential adverse impacts to these utilities are not anticipated. However, any potential impacts to public utilities which serve the FPC (electric power, natural gas, and solid waste collection) would be mitigated by the proper planning, coordination and scheduling of FPC deactivation and closure activities and any associated service disconnections planned by the BOP.

c. No Action Alternative

Under the No Action Alternative, the proposed action would not be implemented and the FPC would continue to operate in its current condition and location. Hence, impacts to utility services would not occur and mitigation measures would not be required.

7. Transportation Systems**a. Potential Impacts**

As noted earlier, the inmate population at the FPC increased steadily from the year of initial camp operation in 1989 to its peak in early 2005 when approximately 700 inmates were housed at the facility. During this period BOP employment steadily increased, also reaching a peak in early 2005 when approximately 92 BOP employees were assigned to the facility. At the present time, approximately 37 employees are assigned to the FPC.

One outcome of the decline in the number of inmates is a corresponding decline in the number of employee, visitor and service vehicles traveling daily to and from the facility. With the proposed deactivation and closure, the BOP would cease all camp operations, with the remaining FPC-generated traffic volume removed from the public roadway network leading to Nellis Air Force Base (principally I-15 and Seymour Johnson Avenue). Recent observations revealed the area roadway network is functioning well with the removal of the FPC-generated employee, visitor, and service vehicle traffic expected to have a slight positive effect. Therefore, no significant adverse impact to area transportation networks is anticipated as a result of the proposed FPC deactivation and closure.

b. Recommended Mitigation

No significant adverse impacts to transportation systems are anticipated as a result of the proposed action, hence, no mitigating measures are warranted.

c. No Action Alternative

Under the No Action Alternative, the proposed action would not be implemented and the FPC would remain operational in its current condition and location. Hence, impacts to transportation systems would not occur and mitigation measures would not be required.

8. Meteorological Conditions**a. Potential Impacts**

Initial development of Nellis Air Force Base including development of the area comprising the FPC, altered the area's natural environment and original microclimate of the FPC site by removal of vegetation and construction of buildings, installation of parking areas and recreational facilities, etc. As no building or ground-altering activities are proposed by the BOP, deactivation and closure of the FPC would not result in any direct impacts to meteorological conditions. Potential impacts to meteorological conditions are not expected to occur as a result of the proposed deactivation and closure of the FPC which would not directly impact the larger-scale climatology of the area. Following deactivation and closure, the grounds and all standing buildings comprising the FPC would be vacated and returned to the U.S. Air Force by the BOP as mutually agreed upon.

b. Recommended Mitigation

No impacts to meteorological conditions are expected to result from the deactivation and closure of the FPC. Hence, mitigating measures involving meteorological conditions are not warranted.

c. No Action Alternative

Under the No Action Alternative, the proposed action would not be implemented and the FPC would continue to operate in its current condition and location. Hence, impacts to meteorological conditions would not occur and mitigation measures would not be required.

9. Air Quality**a. Potential Impacts**

The proposed deactivation and closure of the FPC would pose no direct impact to air quality. As no building or ground-altering activities are proposed by the BOP, deactivation and closure of the FPC is not expected to result in any direct air quality impacts. In addition, the proposed action to deactivate and close the FPC is not expected to result in the emission of CFC's, halons or greenhouse gases. Following deactivation and closure, the grounds and all standing buildings comprising the FPC would be vacated and returned to the U.S. Air Force by the BOP as mutually agreed upon.

b. Recommended Mitigation

No adverse impacts to air quality are expected to result from the deactivation and closure of the FPC. Hence, measures to mitigate potential air quality impacts are not warranted.

c. No Action Alternative

Under the No Action Alternative, the proposed action would not be implemented and the FPC would continue to operate in its current condition and location. Hence, impacts to air quality would not occur and mitigation measures would not be required.

10. Noise**a. Potential Impacts**

Temporary impacts in the immediate vicinity of the FPC would occur during the deactivation and closure process as moving vans and equipment, buses, and other motor vehicles are employed to relocate inmates, personnel, furniture and equipment to other BOP facilities. Any motor vehicle noise would be minimal and last for a limited duration and is typically limited to daylight hours. It is also generally intermittent and attenuates quickly with distance. Therefore, noise resulting from deactivation and closure activities is not expected to significantly adversely affect surrounding properties. Once the FPC has been deactivated and the closure process is complete, noise levels will decrease throughout the area because the facility will no longer be operational.

b. Recommended Mitigation

Given the minimal nature of potential noise impacts and the distance to any adjacent sensitive receptors, no mitigation measures to control noise resulting from the proposed project are warranted.

c. No Action Alternative

Under the No Action Alternative, the proposed action would not be implemented and the FPC would continue to operate in its current condition and location. Hence, impacts to noise levels would not occur and mitigation measures would not be required.

C. SUMMARY OF ANY SIGNIFICANT IMPACTS AND REQUIRED MITIGATION

Implementation of the proposed camp deactivation and closure action would result in less than significant adverse impacts to topography, geology and soils, biological resources, hydrology, cultural resources, land use, aesthetics, fiscal considerations, community services and facilities, utility services, traffic and transportation movements, air quality and noise while beneficial impacts would be realized through implementation of a cost-effective measure to house the growing federal inmate population.

In order to more efficiently and effectively manage minimum-security bedspace and to achieve substantial budget reductions, the BOP has undertaken a number of streamlining and cost reduction initiatives, including the deactivation and closure of correctional facilities considered outdated, obsolete and/or excessively costly to operate and maintain. The objectives of the proposed action are to reduce overall BOP operating costs by deactivating and closing an inefficient stand-alone FPC and avoid the substantial costs of repairing and otherwise maintaining essential infrastructure systems necessary to the operation of the FPC as well as for future improvements to camp buildings, life safety systems, and support facilities. Cumulative and secondary impacts are also not anticipated.

D. RELATIONSHIP BETWEEN SHORT-TERM USE OF THE ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Regulations for the preparation of EAs require them to address the relationship between short-term use of the environment and the maintenance of long-term productivity. In this instance, following a decision to proceed with the proposed action, the BOP would immediately undertake the deactivation and closure process including arranging for the transfer of inmates and staff to other federal correctional facilities. Any positive or negative impacts to the Clark County region during the closure phase would be short-term with expenditures contributing to economic productivity in terms of the supporting employment and induced personal income.

While the economy of the southern Nevada region may be affected by the closure of the FPC (associated with reduced BOP expenditures in the region), the BOP would achieve long-term benefits by avoiding the substantial capital expenditures necessary to maintain operation of the camp as well as for improvements to camp buildings, life safety systems, and support facilities. The proposed action also avoids the higher operational costs associated with stand-alone facilities. The cost saving to the BOP from the proposed closure of the FPC is estimated at approximately \$7.3 million during the first fiscal year (after allowing for deactivation and closure costs); rising to approximately \$10.6 million in the second year; \$10.9 million in the third year, and continuing at increasingly greater amounts in later years.

E. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Regulations for the preparation of EAs also require that they address irreversible and irretrievable commitments of resources associated with the proposed action. In certain circumstances, resources committed would be recovered in a relatively short period of time. In other cases, resources would be irreversibly or irretrievably committed by virtue of being consumed or by the apparent limitlessness of the period of their commitment to a specific use. Irreversible and irretrievable commitments of resources can sometimes be compensated for by the provision of similar resources with substantially the same use or value. In this instance, deactivation and closure of the FPC would result in few, if any, direct commitments of resources.

Any resources consumed as a result of deactivation and closure would be offset by the resulting societal benefits. The proposed action would require the use of a small amount of fossil fuel during the closure and transfer phase which should be considered irretrievably committed to the action. No other resources would be irreversibly or irretrievably committed.

F. SECONDARY AND CUMULATIVE CONSIDERATION OF IMPACTS

All proposed activities are to occur within the confines of the FPC property. Therefore, implementation of the proposed action would not result in significant adverse impacts to the immediate project area, Nellis Air Force Base, or the surrounding community. No adverse impacts are anticipated to topography, geology and soils, biological resources, hydrology, cultural resources, land use, aesthetics, fiscal considerations, community services and facilities, utility services, traffic and transportation movements, air quality and noise while beneficial impacts would be realized through implementation of a cost-effective measure to house the growing federal inmate population. Cumulative and secondary impacts are not anticipated.

V. REFERENCES

V. REFERENCES

A. DOCUMENTS

Black and Veatch, 2001. Nellis Air Force Base Landfill LF-02, Annual Groundwater Monitoring Report, Project RKMF20007001, September.

CH2MHill, Environmental Assessment, Nellis Air Force Base Pipeline Project, Nevada, March 2005.

Federal Bureau of Prisons, *Monday Morning Highlights*, Washington, D.C., October 10, 2005.

Federal Bureau of Prisons, Real Property Survey of FPC Nellis Air Force Base, Washington, D.C., January 26, 1999.

Federal Emergency Management Agency, Federal Flood Insurance Rate Maps, Las Vegas NE and Valley, Nevada.

Longwell, C.R., Pampeyan, E.H., Bower, B., and Roberts, R.J., 1965. Geology and Mineral Deposits of Clark County, Nevada. Bulletin 62, Nevada Bureau of Mines and Geology. Reno: Mackay School of Mines, University of Nevada.

Louie, J. 1996. The Modified Mercalli Scale of Earthquake Intensity. University of Nevada.
<http://www.seismo.unr.edu/ftp/pub/louis/class/100/mercalli.html>.

Louis Berger & Associates, Inc., *Environmental Assessment, Federal Prison Camp, Nellis Air Force Base Nevada*, Federal Bureau of Prisons, Washington, D.C., 1989.

Nellis Air Force Base, 2001. Integrated Natural Resources Management Plan, Nellis Air Force Base/Nellis Air Force Base Range. 99th Civil Engineering Squadron, Environmental Management Flight, February.

Southern Nevada Consensus Housing Unit Estimate, July 2004.

State of Nevada Department of Employment, Training, and Rehabilitation, 2005.

United States Bureau of Census, 1990-2000.

United States Department of the Air Force, Draft Environmental Assessment, Military Family Housing Revitalization Project, Nellis Air Force Base, Nevada, February 2004.

United States Department of the Air Force, Environmental Baseline Survey, Dunning Circle Housing Area, Nellis Air Force Base, Nevada, December 2003.

United States Department of Agriculture, Natural Resource Conservation Service, *Soil Survey of Clark County, Nevada*, 1985.

United States Department of Labor, Bureau of Labor Statistics, July 2005.

United States Department of Labor, Labor Force and Employment Characteristics, 2004.

United States Department of the Interior, Fish and Wildlife Service, National Wetland Inventory Map, Las Vegas NE and Valley, Nevada.

United States Environmental Protection Agency, Air Quality System Quick Look Report (APM450), 2003.

United States Geological Survey, 7.5 Minute Topographic Quadrangle Maps, Las Vegas NE and Valley Nevada, 1973.

B. PERSONAL COMMUNICATIONS

James P. Campe, NEPA Program Manager
Department of the Air Force
Environmental Management Office
99 Civil Engineers/CEVN
4349 Duffer Drive, Suite 1601
Nellis Air Force Base, Nevada 89191-7007

J.M. Killian, Warden
Federal Bureau of Prisons
Federal Prison Camp Nellis
C.S. 4500
Las Vegas, Nevada 89036-4500

Judy Pace, Realty Officer
Department of the Air Force
99 CES/CERR
6020 Beale Avenue
Nellis Air Force Base, Nevada 89191-7260

Robert Spinuzza, Associate Warden
Federal Bureau of Prisons
Federal Prison Camp Nellis
P.O. Box 9910
Las Vegas, Nevada 89191

Lt. Colonel Andrew Whisnant
Department of the Air Force
99 MSG/CD
Nellis Air Force Base, Nevada 89191

Debra Scott, Medical Department
Federal Bureau of Prisons
Federal Prison Camp
P.O. Box 9910
Las Vegas, Nevada 89191

VI. LIST OF PREPARERS

VI. LIST OF PREPARERS

U.S. DEPARTMENT OF JUSTICE

Federal Bureau of Prisons
320 First Street, N.W.
Washington, D.C. 20534

Pamela J. Chandler	-	Chief, Site Selection and Environmental Review Branch
Bridgette Lyles, COTR	-	Environmental Program Specialist
Issac J. Gaston, COTR	-	Site Selection Specialist

THE LOUIS BERGER GROUP, INC.

2300 N Street, N.W.
Washington, D.C. 20037

Robert J. Nardi, P.P., AICP - Project Manager
M.C.R.P., Rutgers University, 1978
B.A., Rutgers University, 1975

Donald E. Ehrenbeck, P.P., AICP - Principal Planner
M.C.R.P., Rutgers University, 1985
B.A., Upsala College, 1979

Mark Renna - Vice President of Environmental Sciences
M.S., Rutgers University, 1982
B.S., Fairfield University, 1979

Cristy Boyd - Senior Environmental Scientist
B.A., Florida Atlantic University, 1993

Heather Shaw - Environmental Scientist
Professional Certification in Geomatics, Rutgers University, 1999
B.S., Rutgers University, 1996

Louis Ragozzino, P.E. - Vice President/Principal Engineer
B.S., New Jersey Institute of Technology, 1984

Kay Simpson, Ph.D. - Vice President, Cultural Resources
Ph.D., University of Arizona, 1983
M.A., University of Arizona, 1974
B.A., University of Arkansas, 1973

Douglas Ganey, CPG - Senior Environmental Scientist
M.E.S.H., University of California, 2001
M.A., University of Massachusetts at Amherst, 1998
B.A., Boston University, 1989

Susan Knauf - Vice President, Quality Assurance
M.S., University of Connecticut, 1976
B.S., College of St. Elizabeth, 1974

**VII. AGENCIES AND OFFICIALS FROM
WHICH COMMENTS ARE REQUESTED**

VII. AGENCIES AND OFFICIALS FROM WHICH COMMENTS ARE REQUESTED

A. CONGRESSIONAL DELEGATION

1. U.S. Senators

The Honorable John Ensign
United States Senate
356 Russell Senate Office Building
Washington, D.C. 20510-2804

The Honorable Harry Reid
United States Senate
528 Hart Senate Office Building
Washington, D.C. 20510-2803

2. U.S. Congressmen

The Honorable Shelley Berkley
United States House of Representatives
439 Cannon House Office Building
Washington, D.C. 20515-2801

The Honorable Jon Porter
United States House of Representatives
218 Cannon House Office Building
Washington, D.C. 20515-2803

The Honorable Jim Gibbons
United States House of Representatives
100 Cannon House Office Building
Washington, D.C. 20515-2802

B. FEDERAL OFFICIALS AND AGENCIES

Michael McGeenin, Director of Environmental
Hazardous Health
National Center for Environmental Health
Centers for Disease Control & Prevention
Special Programs Group, Mail Stop E-19
4770 Buford Highway, N.E.
Atlanta, Georgia 30333

Don Klima, Director
Western Office of Project Review
Advisory Council on Historic Preservation
12136 West Bayard Avenue, Suite 330
Lakewood, Colorado 80228

Joseph E. Gunja, Regional Director
Western Regional Office
Federal Bureau of Prisons
7950 Dublin Boulevard, 3rd Floor
Dublin, California 94568

Ken Domako
Department of the Air Force
Environmental Management Office
99 Civil Engineers/CEVN
4349 Duffer Drive, Suite 1601
Nellis Air Force Base, Nevada 89191-7007

The Honorable John Clark, Acting Director
Office of the Director
United States Marshals Service Headquarters
Washington, D.C. 20530-1000

Stacia Hilton, Federal Detention Trustee
U.S. Department of Justice
Office of the Federal Detention Trustee
1331 Pennsylvania Avenue, N.W.
National Place Building, Suite 1210
Washington, D.C. 20530

Willie R. Taylor, Director
U.S. Department of the Interior
Office of Environmental Policy & Compliance
Main Interior Building, MS 2342
1849 C Street, N.W.
Washington, D.C. 20240 (12 copies)

U.S. Environmental Protection Agency
Office of Compliance and Enforcement
75 Hawthorne Street
San Francisco, California 94105

Pearl Young
U.S. Environmental Protection Agency
Office of Federal Activities—NEPA Compliance
1200 Pennsylvania Avenue, N.W., Room 7241
Washington, D.C. 20004

J.M. Killian, Warden
Federal Bureau of Prisons
Federal Prison Camp Nellis
C.S. 4500
Las Vegas, Nevada 89036-4500

C. STATE OF NEVADA OFFICIALS AND AGENCIES

The Honorable Kenny C. Guinn
Office of the Governor
Capitol Building
Carson City, Nevada 89701

Kim Perondi
Nevada State Clearinghouse
Department of Administration
209 East Musser Street, Room 200
Carson City, Nevada 89701

Glen Whorton, Director
Nevada Department of Corrections
Central Administration
Stewart Facility
5500 Snyder Avenue, Building 17
Carson City, Nevada 89701

Tom Collins, Commissioner
Clark County Commission
500 Grand Central Parkway
Las Vegas, Nevada 89106

Yvonne Atkinson Gates, Commissioner
Clark County Commission
500 Grand Central Parkway
Las Vegas, Nevada 89106

Rory Reid, Chairman
Clark County Commission
500 Grand Central Parkway
Las Vegas, Nevada 89106

Thomas F. Reilly, County Manager
Clark County Manager's Office
500 South Grand Central Parkway
Las Vegas, Nevada 89106

Bruce L. Woodbury, Commissioner
Clark County Commission
500 Grand Central Parkway
Las Vegas, Nevada 89106

Jennifer Olsen
Southern Nevada Regional Planning Coalition
Clark County Clearinghouse
240 Water Street, Mail Stop 115
Henderson, Nevada 89009

Chip Maxwell, Commissioner
Clark County Commission
500 Grand Central Parkway
Las Vegas, Nevada 89106

Lynette Boggs McDonald, Commissioner
Clark County Commission
500 Grand Central Parkway
Las Vegas, Nevada 89106

Myrna Williams, Commissioner
Clark County Commission
500 Grand Central Parkway
Las Vegas, Nevada 89106

E. MUNICIPAL OFFICIALS AND AGENCIES

Oscar B. Goodman, Mayor
City of Las Vegas
City Hall, Tenth Floor
400 Stewart Avenue
Las Vegas, Nevada 89101

Douglas Selby, City Manager
City Hall, Eighth Floor
400 Stewart Avenue
Las Vegas, Nevada 89101

Jim Gibson, Mayor
Henderson City Hall
P.O. Box 95050
Henderson, Nevada 89009-5050

Philip Speight, City Manager
Henderson City Hall
P.O. Box 95050
Henderson, Nevada 89009-5050

Michael L. Montandon, Mayor
City of North Las Vegas
2200 Civic Center Drive
North Las Vegas, Nevada 89030

Gregory E. Rose, City Manager
City of North Las Vegas
2200 Civic Center Drive
North Las Vegas, Nevada 89030

Robert Ferraro, Mayor
City Hall
P.O. Box 61350
Boulder City, Nevada 89006

Vicki Mayes, City Manager
City Hall
P.O. Box 61350
Boulder City, Nevada 89006

F. OTHERS

Nellis Air Force Base Library
4311 North Washington Boulevard
Building 312, Suite 101
Nellis Air Force Base, Nevada 89191

Las Vegas-Clark County Library District
833 Las Vegas Boulevard, North
Las Vegas, Nevada 89101

North Las Vegas Library District
2300 Civic Center Drive
North Las Vegas, Nevada 89030

APPENDICES

APPENDIX A
CORRESPONDENCE



THE Louis Berger Group, INC.

30 Vreeland Road, Florham Park, New Jersey 07932-1904
Tel 973 765 1800 Fax 973 765 9891 www.louisberger.com

September 8, 2005

Cynthia Martinez, Supervisor
U.S. Fish and Wildlife Service
Southern Nevada Field Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130

**RE: Environmental Assessment for Proposed Federal Prison Camp Closure
Nellis Air Force Base - Clark County, Nevada**

Dear Ms. Martinez:

On behalf of the Federal Bureau of Prisons (BOP), The Louis Berger Group, Inc. is preparing an Environmental Assessment for the proposed deactivation and closure of a Federal Prison Camp (FPC) located at Nellis Air Force Base in Clark County, Nevada. The proposed action involves the closure of the FPC and the return of the 56-acre property and all buildings and structures to the U.S. Air Force for their use. No adverse impacts to native vegetation, wetlands, surface water bodies or unique faunal habitats are expected to occur as a result of the proposed action.

In accordance with the National Environmental Policy Act (NEPA), we are contacting your office for assistance in identifying the potential presence of any federal and site threatened, endangered, proposed or candidate species in the vicinity of the FPC (the project site). In addition, information regarding the presence of environmentally sensitive habitats occurring within the vicinity of the FPC is also requested.

Enclosed is a copy of a map with the study area indicated. If you have any questions regarding this request, please contact me at 973-765-1898. We look forward to your reply. Thank you for your time and assistance.

Sincerely yours,

THE LOUIS BERGER GROUP, INC.

Robert J. Nardi, P.P., AICP
Project Manager

Attachment



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Nevada Fish and Wildlife Office

1340 Financial Blvd., Suite 234

Reno, Nevada 89502

Ph: (775) 861-6300 ~ Fax: (775) 861-6301

October 12, 2005

File No. 1-5-06-SP-407

Mr. Robert J. Nardi
The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, New Jersey 07932-1904

Dear Mr. Nardi:

Subject: Species List for the Proposed Federal Prison Camp Closure at Nellis Air Force Base, Clark County, Nevada

This responds to your letter dated September 8, 2005, requesting information regarding federally listed species and their designated critical habitat located near the Federal prison camp at Nellis Air Force Base in Clark County, Nevada. The following federally listed species may occur in or near the vicinity of the project:

- Desert tortoise (*Gopherus agassizii*) (Mojave population), threatened

This response fulfills the requirement of the Fish and Wildlife Service (Service) to provide a list of species pursuant to section 7(c) of the Endangered Species Act of 1973, as amended, (Act) for projects that are authorized, funded, or carried out by a Federal agency.

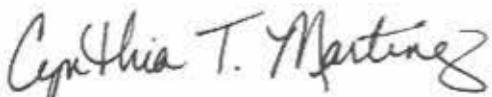
The Nevada Fish and Wildlife Office no longer provides species of concern lists. Most of these species for which we have concern, are also on the sensitive species list for Nevada maintained by the State of Nevada's Natural Heritage Program (Heritage). Instead of maintaining our own list, we adopted Heritage's sensitive species list and are partnering with them to provide distribution data and information on the conservation needs for sensitive species to agencies or project proponents. The mission of Heritage is to continually evaluate the conservation priorities of native plants, animals, and their habitats, particularly those most vulnerable to extinction or are in serious decline. Consideration of these sensitive species and exploring management alternatives early in the planning process can provide long-term conservation benefits and avoid future conflicts.

For a list of sensitive species by county, visit Heritage's website at www.heritage.nv.gov. For a specific list of sensitive species that may occur on the property, you can obtain a data request form from the website or by contacting Heritage at 901 South Stewart Street, Suite 5002, Carson City, Nevada 89701-5245, 775-684-2900. Please indicate on the form that your request is being obtained as part of your coordination with the Service under the Act. During project analyses, if you obtain new information or data for any Nevada sensitive species, we request that you provide the information to Heritage at the above address.

Our agency also holds conservation responsibilities and management authority for migratory birds under the Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 et. seq.). Projects should be evaluated for potential impacts to migratory birds in the area. Under the MBTA, nests (nests with eggs or young) of migratory birds may not be harmed, nor may migratory birds be killed. Such destruction may be in violation of the MBTA. Therefore, we recommend land clearing, or other surface disturbance associated with proposed projects, be conducted outside the avian breeding season to avoid potential destruction of bird nests or young, or birds that breed in the area. If this is not feasible, we recommend a qualified biologist survey the area prior to land clearing. If nests are located, or if other evidence of nesting (i.e., mated pairs, territorial defense, carrying nesting material, transporting food) is observed, a protective buffer (the size depending on the habitat requirements of the species) should be delineated and the entire area avoided to prevent destruction or disturbance to nests until they are no longer active.

Please reference File No. 1-5-06-SP-407 in future correspondence concerning this species list. If you have any questions regarding this correspondence or require additional information, please contact Christiana Manville in our Southern Nevada Field Office at (702) 515-5230.

Sincerely,


for Robert D. Williams
Field Supervisor



THE Louis Berger Group, INC.

30 Vreeland Road, Florham Park, New Jersey 07932-1904
Tel: 973 765 1800 Fax 973 765 9891 www.louisberger.com

September 8, 2005

Elsie Sellars, Biologist
Nevada Department of Wildlife
Wildlife Diversity Bureau
4747 North Vegas Drive
Las Vegas, Nevada 89108

**RE: Environmental Assessment for Proposed Federal Prison Camp Closure
Nellis Air Force Base - Clark County, Nevada**

Dear Ms. Sellars:

On behalf of the Federal Bureau of Prisons (BOP), The Louis Berger Group, Inc. is preparing an Environmental Assessment for the proposed deactivation and closure of the Federal Prison Camp (FPC) located at Nellis Air Force Base in Clark County, Nevada. The proposed action involves the closure of the FPC and the return of the 56-acre property and all buildings and structures to the U.S. Air Force for their use. No adverse impacts to native vegetation, wetlands, surface water bodies or unique faunal habitats are expected to occur as a result of the proposed action.

In accordance with the National Environmental Policy Act (NEPA), we are contacting your office for assistance in identifying the potential presence of any federal and state threatened, endangered, proposed or candidate species in the vicinity of the FPC (the project site). In addition, information regarding the presence of environmentally sensitive habitats occurring within the vicinity of the FPC is also requested.

Enclosed is a copy of a map with the study area indicated. If you have any questions regarding this request, please contact me at 973-765-1989. We look forward to your reply. Thank you in advance for your time and assistance.

Sincerely yours,

THE LOUIS BERGER GROUP, INC.

Robert J. Nardi, P.P., AICP
Project Manager

Attachment



KENNY C. GUINN
Governor

STATE OF NEVADA
DEPARTMENT OF WILDLIFE

1100 Valley Road
Reno, Nevada 89512
(775) 688-1500 • Fax (775) 688-1595

TERRY R. CRAWFORTH
Director

GENE WELLER
Deputy Director

SOUTHERN REGION
4747 WEST VEGAS DRIVE
LAS VEGAS, NEVADA 89108
(702) 486-5127; 486-5133 FAX

September 26, 2005

NDOW-SR# 06-041

Mr. Robert J. Nardi, Project Mgr.
The Louis Berger Group, Inc.
30 Vreeland Road,
Florham Park, NJ 07932-1904

Re: Environmental Assessment for Proposed Federal Prison Camp Closure
Nellis Air Force Base – Clark County, Nevada

Dear Mr. Nardi:

Thank you for your letter of last September 8th noticing us of EA development for the proposed project. Based on the brief description provided, the Nevada Department of Wildlife (Department) does not foresee any obvious, significant impacts to wildlife or their habitats consequential to the proposed action on the 56-acre site.

Because of the somewhat vague nature of the request for the presence of environmentally sensitive habitats in the vicinity of the FPC, the Department has the following considerations for historical and present distributions regarding wildlife of interest.

- Desert Tortoise: Threatened listing under federal Endangered Species Act; State of Nevada Protected Species and Threatened. Historically, the desert tortoise occurred on the lands that became the Nellis AFB and Subject prison. Wild desert tortoises still occur on nearby lands, both federal and non-federal.
- Gila Monster: State of Nevada Protected Species. The lizard occurs in the area. Airmen found a dead gila monster within Area 2 of Nellis AFB and reported to the Department in the early 1990's. Other sightings are reported from nearby lands as well.
- Peregrine Falcon: Federal & State Protected (State of Nevada Endangered). An active nest site is located on the south end of Frenchman Mountain.
- Prairie Falcon: Federal & State Protected; also a BLM Sensitive species. Airspace may be occasionally frequented by this falcon.

- Burrowing Owl: Federal and State Protected; also a BLM Sensitive species. Burrowing Owls occur in the area, and at other locations of the Nellis AFB and adjacent lands.
- Desert Bighorn Sheep BLM Sensitive Species and intensively managed by the State of Nevada (State Animal). Historically, bighorn inhabited the Frenchman and Sunrise mountains, and traversed the area now occupied by the present Nellis AFB and Interstate 15 until these features and activities associated with the growing Las Vegas Valley community were barriers to or avoided by bighorn.
- Bats: Several bat species including Pallid, Brazilian Free-tailed, Spotted, California leaf-nosed, Townsend's big-eared, which are all State of Nevada Protected and BLM Sensitive species, may at least frequent the air space at or adjacent to the project site.
- Migratory Birds: Federal and State Protected. Two species, Loggerhead Shrike and Brewer's Sparrow, are further classified as sensitive by State of Nevada.

Mr. Robert (Bob) Turner, Natural Resources Manager, Nellis AFB, may also be of service to your needs regarding your query. He can be contacted at:

Robert J. Turner, Natural Resources Manager
99th Civil Engineering Squadron/EM
4349 Duffer Drive, Suite 1601
Nellis Air Force Base, NV 89191-7007
702/652-3173; E-mail: Robert.Turner1@nellis.af.mil

Because the Department's regulatory purview is limited to wildlife as defined in Nevada Revised Statutes and Nevada Administrative Codes, I suggest contacting Ms. Margie Klein, Nevada Division of Forestry, for information on State laws regarding plants. She can be reached at (702) 486-5123, or:

Nevada Division of Forestry
4747 West Vegas Drive
Las Vegas, NV 89108

Additionally, Federal level assessments are appropriate as:

- Matters concerning animal and plant species protected under the Endangered Species Act of 1973, as amended, are ultimately administered by the U.S. Fish and Wildlife Service. The local office can be contacted at (702) 515-5230, or direct mail to:

U.S. Fish and Wildlife Service
Nevada Ecological Services
Las Vegas Sub-Office
4701 N. Torrey Pines Drive
Las Vegas, NV 89130

Lastly, information about BLM Sensitive species may be obtained by contacting the Las Vegas Field Office at 702/515-5000, or directing mail to:

Mr. Juan Palma, Field Office Manager
Bureau of Land Management
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, NV 89130

Thank you again for your interest in Nevada's wildlife resources. Please contact me at 702/486-5127 x3600 or by e-mail at bhrdnbrk@ndow.org. should there be any questions or other needs.

Sincerely,



D. Bradford Hardenbrook
Supervisory Biologist - Habitat

DBH:dbh

cc: NDOW, Files

APPENDIX B
RARE SPECIES LIST
CLARK COUNTY, NEVADA

banner of the Nevada Natural Heritage Program

CLARK COUNTY RARE SPECIES LIST

(18 March 2004)

As of the date above, this list provides information for the 194 Clark County plants and animals included on the Nevada At-risk Animal and At-risk Plant and Lichen tracking lists and on the Nevada Plant and Animal Watch List. These data reflect **only what was entered in our computer databases** as of the above date; additional information for some species may await processing in paper files, or may have been entered subsequently.

Information provided for each taxon in the columns below include the various agency status and rank designations, sand and wetland habitat indicators, and endemic status within Nevada. A new Occurrence Status (OCC) column has been added to the left side of the list to show any special status within the county: ?=possible or predicted in the county but not yet confirmed, e=endemic in-state (known in Nevada only from this county), E=endemic (known worldwide only from this county), and I=only introduced or re-introduced occurrence(s) present in this county.

More detailed state-wide information for these taxa is available in our Detailed Rare Plant and Lichen and Detailed Rare Animal lists, and in the Nevada Rare Plant Atlas, which provides comprehensive information on **habitat, life-history, description, threats, survey status, literature sources, and known locations** for most plant taxa. Further information may be available on-line for some taxa in other lists or reports, or as maps or images, and general information is available for nearly all taxa on the NatureServe Explorer web site.

Click on a column heading for an explanation of that column. You may need to scroll horizontally in your browser to see all columns. You may also jump to the at-risk taxa or the watch-list taxa.

OCC RANKS..... ESA. BLM FS. TAXON NAME AND (VERNACULAR NAME) NV. 2N

AT-RISK TAXA TRACKED

***** Plants - Bryophytes (moss allies)

e	G2		Crossidium seriatum		W
	S2		(rough fringemoss)		
e	G2G3	n	Didymodon nevadensis		W

	SI		(Gold Butte moss)	
e	G1		<i>Grimmia americana</i>	W
	S1		(American grimmia)	

e	G2?		<i>Trichostomum sweetii</i>	W
	S1		(Sweet trichostomum)	

***** Plants - Pteridophytes (fern allies)

e	G2G3	xC2	sc <i>Botrychium ascendens</i>	W
	S1		(upswept moonwort)	
G3		xC2	n si <i>Botrychium crenulatum</i>	W
	S1?		(dainty moonwort)	

e	G2G3		<i>Selaginella utahensis</i>	W
	SH		(Utah spikemoss)	

***** Plants - Flowering Dicots

E	G2	xC2	n s <i>Angelica scabrida</i>	T
	S2		(rough angelica)	
E	G1G2	xC2	s <i>Antennaria soliceps</i>	W
	S1S2		(Charleston pussytoes)	
e	G3	xC2	s <i>Arctomecon californica</i>	CE T
	S3		(Las Vegas bearpoppy)	
G3		xC2	n s <i>Arctomecon merriamii</i>	W
	S3		(white bearpoppy)	
T2?G5			<i>Arenaria congesta</i> var. <i>charlestonensis</i>	W
	S2?		(Mount Charleston sandwort)	
E	T2G4	xC2	s <i>Arenaria Kingii</i> ssp. <i>rosea</i>	W
	S2		(rosy King sandwort)	
G2			<i>Arenaria stenomeres</i>	W
	S2		(Meadow Valley sandwort)	
G2			<i>Astragalus ackermanii</i>	W
	S2		(Ackerman milkvetch)	
E	G2	xC2	n s <i>Astragalus aequalis</i>	W
	S2		(Clokey milkvetch)	
T2G5		xC2	n <i>Astragalus amphioxys</i> var. <i>musimonum</i>	W
	S2		(Sheep Range milkvetch)	
T2QG5			<i>Astragalus calycosus</i> var. <i>monophyllidius</i>	W
	S2		(one-leaflet Torrey milkvetch)	
G2		xC2	nc s <i>Astragalus funereus</i>	W
	S2		(black woollypod)	

	T2T3G4?	xC2	s	<i>Astragalus geyeri</i> var. <i>triquetrus</i> (threecorner milkvetch)	CE	T
	S2S3					
e	T3?G5		i	<i>Astragalus lentiginosus</i> var. <i>kernensis</i> (Kern Plateau milkvetch)		W
	S1					
	T2T3G5			<i>Astragalus lentiginosus</i> var. <i>stramineus</i> (straw milkvetch)		W
	S1S2					
	T2T3G3	xC2	sc	s <i>Astragalus mohavensis</i> var. <i>hemigyrus</i> (halfring milkvetch)	CE	E
	S2S3					
e	G2G3Q		n	<i>Astragalus mokiensis</i> (Mokiak milkvetch)		W
	S1S2					
	G3			<i>Astragalus nyensis</i> (Nye milkvetch)		D
	S3					
	T2G4	RA	s	s <i>Astragalus oophorus</i> var. <i>clokeyanus</i> (Clokey eggvetch)		W
	S2					
E	G2	xC2	n	s <i>Astragalus remotus</i> (Spring Mountains milkvetch)		W
	S2					
	G1	xC2	n	<i>Chrysothamnus eremobius</i> (remote rabbitbrush)		W
	S1					
E	G2G3			<i>Cirsium clokeyi</i> (Clokey thistle)		D
	S2S3					
e	G2	xC2		<i>Cirsium virginense</i> (Virgin River thistle)		W
	S1					
E	GHQ	xC2*	s	<i>Cryptantha insolita</i> (Las Vegas catseye)	CE	PE
	SH					
e	G1G2			<i>Draba brachystylis</i> (Wasatch draba)		W
	S1					
E	G2	xC2	s	<i>Draba jaegeri</i> (Jaeger whitlowcress)		W
	S2					
E	G1G2	xC2	s	<i>Draba paucifructa</i> (Charleston draba)		W
	S1S2					
e	G2G3		n	<i>Enceliopsis argophylla</i> (silverleaf sunray)		W
	S1?					
	G2	xC2	n	s <i>Epilobium nevadense</i> (Nevada willowherb)		W
	S2					
	G3?			<i>Ericameria cervina</i> (Antelope Canyon goldenbush)		W
	S1					
E	G2?		s	<i>Ericameria compacta</i> (Charleston goldenbush)		W
	S2?					

G2	xC2	n	Erigeron ovinus (sheep fleabane)	W	
S2					
G2	xC2	nc	Eriogonum bifurcatum (Pahrump Valley buckwheat)	T	
S2					
e	T2T3?QG5		n	Eriogonum corymbosum var. (unnamed) (Las Vegas buckwheat)	CE# W
S1S2					
T2G5		n	Eriogonum heermannii var. clokeyi (Clokey buckwheat)	W	
S2					
G2	xC2	s	Eriogonum viscidulum (sticky buckwheat)	CE T	
S2					
E	G2	xC2	s	Glossopetalon clokeyi (Clokey greasebush)	W
S2					
e	T1QG2G3	xC2	nc	Glossopetalon pungens var. glabrum (smooth dwarf greasebush)	W
S1					
T2QG2G3		n	Glossopetalon pungens var. pungens (rough dwarf greasebush)	W	
S2					
G2G3Q			Helianthus deserticola (dune sunflower)	W	
S2					
E	G1		n	Ionactis caelestis (Red Rock Canyon aster)	W
S1					
E	G2	xC2	s	Ivesia cryptocaulis (hidden ivesia)	W
S2					
e	G2G3	xC2	nc	Ivesia jaegeri (Jaeger ivesia)	W
S2S3					
e	T1G4?		n	Lotus argyraeus var. multicaulis (scrub lotus)	W
S1?					
E	T1QG4?	RI	s	Opuntia whipplei var. multigeniculata (Blue Diamond cholla)	CE T CY
S1					
e	G3	xC2		Pediomelum castoreum (Beaver Dam breadroot)	W
S3					
G2	xC2	nc	Penstemon albomarginatus (white-margined beardtongue)	T	
S2					
e	T2QG3	xC2	n	Penstemon bicolor ssp. bicolor (yellow twotone beardtongue)	W
S2					
T3QG3	xC2	n	Penstemon bicolor ssp. roseus (rosy twotone beardtongue)	W	
S3					
?	T3G4	xC2	nc	Penstemon fruticiformis ssp. amargosae (Death Valley beardtongue)	T
S2					
E	T2G3			Penstemon leiophyllus var. keckii	W

	S2			(Charleston beardtongue)	
E	T2G4			<i>Penstemon thompsoniae</i> ssp. <i>jaegeri</i>	
	S2			(Jaeger beardtongue)	
	G2		n	<i>Phacelia filiae</i>	
	S2			(Clarke phacelia)	
	G2G3	xC2	nc	<i>Phacelia parishii</i>	
	S2S3			(Parish phacelia)	
	G2	xC2	n	<i>Porophyllum pygmaeum</i>	
	S2			(pygmy poreleaf)	
E	T3G5	xC2	n	<i>Salvia dorrii</i> var. <i>clokeyi</i>	
	S3			(Clokey mountain sage)	
E	G2	xC2		<i>Silene clokeyi</i>	
	S2			(Clokey catchfly)	
E	G2			<i>Sphaeromeria compacta</i>	
	S2			(Charleston tansy)	
E	G2G3			<i>Synthyris ranunculina</i>	
	S2S3			(Charleston kittentails)	
	T3G4	xC2	n	<i>Townsendia jonesii</i> var. <i>tumulosa</i>	
	S3			(Charleston grounddaisy)	
e	G3Q			<i>Viola charlestonensis</i>	
	S2S3			(Charleston violet)	

***** Plants - Flowering Monocots

G2	xC2	nc	c	<i>Calochortus striatus</i>	
	S1			(alkali mariposa lily)	
G2?Q				<i>Sisyrinchium radicatum</i>	
	S1S2			(St. George blue-eyed grass)	

***** Mollusks

E	G1G2	xC2		<i>Pyrgulopsis avernalis</i>	
	S1S2			(Moapa pebblesnail)	
E	G1			<i>Pyrgulopsis carinifera</i>	
	S1			(Moapa Valley springsnail)	
E	GH			<i>Pyrgulopsis coloradensis</i>	
	SH			(Blue Point springsnail)	
E	G1		n	<i>Pyrgulopsis deaconi</i>	
	S1			(Spring Mountains pyrg)	
E	G1			<i>Pyrgulopsis fausta</i>	
	S1			(Corn Creek springsnail)	

G2			Pyrulopsis turbatrix (southeast Nevada springsnail)
S2			
G2	xC2	n	Tryonia clathrata (grated tryonia)
S2			
***** Insects			
E	G1?	n	Aegialia knighti (aegialian scarab beetle)
	S1		
e	G2	n	Andrena balsamorhizae (Mojave Gypsum Bee)
	S2		
T1G4G5		n	Chlosyne acastus robusta (Spring Mountains acastus checkerspot)
	S1		
T2G5			Euphilotes ancilla purpura (Spring Mountains dark blue)
	S1S2		
E	T2G5	xC2	Euphydryas anicia morandi (Morand's checkerspot)
	S2		
T3G5		xC2	Hesperia colorado mojavensis (Spring Mountains comma skipper)
	S3		
e	G2G3	xC2	Hesperopsis graciella (MacNeill sooty wing)
	S1		
E	T2G5	xC2	Icaricia icarioides austinatorum (Spring Mountains icarioides blue)
	S2		
E	T2G5	xC2	Icaricia shasta charlestonensis (Spring Mountains blue)
	S2		
E	G1?		Lasius nevadensis (endemic ant)
	S1		
T2T3G5		xC2	Limenitis weidemeyerii nevadae (Nevada admiral)
	S2S3		
E	G1		Limnocoris moapensis (Warm Springs naucorid)
	S1		
E	G2		Megandrena mentzeliae (Red-tailed Blazing Star Bee)
	S2		
T1G1G3		n	Pelocoris shoshone shoshone (Pahranagat naucorid bug)
	S1		
e	G?		Perdita cephalotes (big-headed perdita)
	S?		
e	G2	n	Perdita meconis (Mojave poppy bee)
	S2		

E	G2G3 S2S3	xC2		Speyeria carolae (Carole's silverspot)
E	G1 S1	xC2	n	Stenelmis moapa (Moapa Warm Spring riffle beetle)

***** Fishes

e	G3G4 S1	xC2	n	Catostomus latipinnis (flannelmouth sucker)	
E	T2G2 S2	xC2		Crenichthys baileyi moapae (Moapa White River springfish)	yes
E	T1G1 S1	LEPT	s	Empetrichthys latos latos (Pahrump poolfish)	yes
e	G1 S1	LE	s	Gila elegans (bonytail chub)	yes
e	G1 S1	LE	s	Gila seminuda (Virgin River chub)	yes
E	T1QG1 S1	LE	n	Gila seminuda pop (Virgin River chub (Muddy River pop.))	yes
	T1G1 S1		n	Lepidomeda mollispinis mollispinis (Virgin River spinedace)	yes
E	G1 S1	LE	s	Moapa coriacea (Moapa dace)	yes
e	G1 S1	LEXN	s	Flagopterus argentissimus (woundfin)	yes
E	T1G5 S1	xC2	n	Rhinichthys osculus moapae (Moapa speckled dace)	yes
e	G1 S1	LE	s	Xyrauchen texanus (razorback sucker)	yes

***** Amphibians

	G3G4 S1S2		n	Bufo microscaphus (southwestern toad)	
e	G1 S1	C		Rana onca (relict leopard frog)	yes

***** Reptiles

G4 S3	LTNL	s	t	Gopherus agassizii (desert tortoise (Mojave Desert pop.))	yes
T4G4	xC2N	nc		Heloderma suspectum cinctum	yes

S2 L (banded Gila monster)

***** Mammals

G4	nc	si	<i>Corynorhinus townsendii</i> (Townsend's big-eared bat)	
S3B				
G4	xC2	s	<i>Euderma maculatum</i> (spotted bat)	yes
S1S2				
e T4G5	xC2	nc	<i>Eumops perotis californicus</i> (greater western mastiff bat)	
S1				
e G3G4	xC2	n	<i>Idionycteris phyllotis</i> (Allen's big-eared bat)	
S1				
G5	n	i	<i>Lasiurus blossevillii</i> (western red bat)	
S1S2				
e G5	nc		<i>Lasiurus xanthinus</i> (western yellow bat)	
S1				
e G4	xC2	nc	<i>Macrotus californicus</i> (California leaf-nosed bat)	
S2				
G5	n		<i>Myotis californicus</i> (California myotis)	
S3B				
G5	xC2	nc	<i>Myotis ciliolabrum</i> (western small-footed myotis)	
S3B				
? G5	n		<i>Myotis lucifugus</i> (little brown myotis)	
S1S2				
G4G5	xC2	nc	<i>Myotis thysanodes</i> (fringed myotis)	
S2B				
e G5	xC2	nc	<i>Myotis velifer</i> (cave myotis)	
S1				
e G2	xC2		<i>Neotamias palmeri</i> (Palmer's chipmunk)	
S2				
e THG5	xC2		<i>Neotamias umbrinus nevadensis</i> (Hidden Forest Uinta chipmunk)	
SH				
e G5	xC2	n	<i>Nyctinomops macrotis</i> (big free-tailed bat)	
S1N				

***** Birds

TUG4	xC2	nc	<i>Athene cunicularia hypugaea</i> (Western Burrowing Owl)	yes
S3B				
G4	xC2	n	<i>Buteo regalis</i> (Ferruginous Hawk)	yes
S3				

T3G5 S1B	C	s	i	<i>Coccyzus americanus occidentalis</i> (Western Yellow-billed Cuckoo)	yes
T1T2G5 S1B	LE	s	e	<i>Empidonax traillii extimus</i> (Southwestern Willow Flycatcher)	yes
G4 S2	LENL	n	e	<i>Falco peregrinus</i> (Peregrine Falcon)	yes
T2T3G5 S2N	xC2	n		<i>Ixobrychus exilis hesperis</i> (Western Least Bittern)	yes
G4 S4?B		n	s	<i>Otus flammeolus</i> (Flammulated Owl)	yes
G5 S2B		n		<i>Phainopepla nitens</i> (Phainopepla)	yes
T?G5 S1	LE			<i>Rallus longirostris yumanensis</i> (Yuma Clapper Rail)	yes

WATCH-LIST TAXA

***** Plants - Pteridophytes (fern allies)

?	G1 SR	C	c	<i>Botrychium lineare</i> (slender moonwort)	W
---	----------	---	---	---	---

***** Plants - Gymnosperms (conifers)

G3 S2			Ephedra funerea (Death Valley Mormon tea)	D
----------	--	--	--	---

***** Plants - Flowering Dicots

T3T4G4 S1?		i	<i>Abronia nana</i> ssp. <i>covillei</i> (Coville abronia)	
G3 S3		ci	<i>Arabis shockleyi</i> (Shockley rockcress)	D
T3?G3 S2S3			<i>Astragalus mohavensis</i> var. <i>mohavensis</i> (Mojave milkvetch)	
e T2T3G4 S1S2			<i>Astragalus preussii</i> var. <i>laxiflorus</i> (Littlefield milkvetch)	
T3QG3Q S3			<i>Castilleja martinii</i> var. <i>clokeyi</i> (Clokey paintbrush)	D
G4? S2		s	<i>Cryptantha tumulosa</i> (New York Mountains catseye)	W

T4T5G4G5		Dudleya pulverulenta ssp. arizonica (chalk liveforever)	
S3			
T3?G3G4		Erigeron uncialis var. conjugans (Charleston fleabane)	D
S3?			
G2?		Eriogonum contiguum (Amargosa buckwheat)	D
S1			
e G2G3		Eriogonum mensicola (Pinyon Mesa buckwheat)	
S1			
e G4G5	n	Eustoma exaltatum (catchfly gentian)	M
S1			
T4?QG5	s	Ferocactus cylindraceus var. lecontei (Mojave barrel cactus)	CY
S4			
G3		Gilia ripleyi (Ripley gilia)	D
S3			
G3		Lesquerella hitchcockii (Hitchcock bladderpod)	D
S3			
G3?		Linanthus arenicola (dune linanthus)	D
S3			
e T3?G4		Lomatium graveolens var. alpinum (Alpine stinking lomatium)	D
S2S3			
T3T4G5		Machaeranthera grindelioides var. depressa (rayless tansy aster)	D
S3			
G3		Mirabilis pudica (bashful four-o'clock)	D
S3			
E T3QG4	xC2	Pedicularis semibarbata var. charlestonensis (Charleston pinewood lousewort)	D
S3			
G3Q		Perityle intricata (desert rockdaisy)	D
S3			
G2G3		Phacelia anelsonii (Aven Nelson phacelia)	D
S1S2			
T3T4G5		Phacelia hastata var. charlestonensis (Spring Mountains phacelia)	
S3S4			
G3G4	p	Phacelia petrosa (rock phacelia)	M
S2			

***** Plants - Flowering Monocots

T3QG4		Agave utahensis var. eborispina (ivory-spined agave)	D
S3			
T3QG4		Agave utahensis var. nevadensis	D

S3 (Clark Mountain agave)

***** Insects

e G?	Halipius eremicus
S?	(Warm Springs crawling water beetle)
G4	Stenelmis occidentalis
S1S2	(neararctic riffle beetle)

***** Amphibians

G5	n	Rana pipiens
S2S3		(northern leopard frog)

***** Reptiles

G5	xC2	n	Sauromalus obesus
S3S4			(common chuckwalla)

***** Mammals

G5	nc	i	Antrozous pallidus
S3B			(pallid bat)

G5			Chaetodipus penicillatus
S2			(desert pocket mouse)

e G5			Chaetodipus spinatus
S3			(spiny pocket mouse)

e G4	xC2		Choeronycteris mexicana
SA			(Mexican long-tongued bat)

G5		n	Lasionycteris noctivagans
S3N			(silver-haired bat)

G5		n	Lasiurus cinereus
S3?			(hoary bat)

G5	xC2	nc	Myotis evotis
S4B			(long-eared myotis)

G5	xC2	n	Myotis volans
S4B			(long-legged myotis)

G5	xC2	nc	Myotis yumanensis
S4B			(Yuma myotis)

G5		n	Pipistrellus hesperus
S4			(western pipistrelle)

G3G4			Sorex tenellus
S2			(Inyo shrew)

G5 n *Tadarida brasiliensis*
 S4B (Brazilian free-tailed bat)

***** Birds

G5		n	<i>Aquila chrysaetos</i> (Golden Eagle)	yes
G5	S4	n	<i>Asio otus</i> (Long-eared Owl)	yes
G2	SZN	PT	<i>Charadrius montanus</i> (Mountain Plover)	yes
G5	S3B	p	<i>Dendroica petechia</i> (Yellow Warbler)	yes
G5	S4	n	<i>Falco mexicanus</i> (Prairie Falcon)	yes
G5	S3B	p	<i>Geothlypis trichas</i> (Common Yellowthroat)	yes
G5	S4	n	<i>Gymnorhinus cyanocephalus</i> (Pinyon Jay)	yes
G5	S3B	n	<i>Icteria virens</i> (Yellow-breasted Chat)	yes
G4	S3	xC2N L	<i>Lanius ludovicianus</i> (Loggerhead Shrike)	yes
G4	SAN	LENL	<i>Mycteria americana</i> (Wood Stork)	yes
G5	S4B	n	<i>Pooecetes gramineus</i> (Vesper Sparrow)	yes
G5	S4S5B	n	<i>Sphyrapicus nuchalis</i> (Red-naped Sapsucker)	yes
e	G4 SAN	LENL	<i>Sterna antillarum</i> (Least Tern)	yes
G5	S3S4	n	<i>Toxostoma crissale</i> (Crissal Thrasher)	yes
e	G3 S3	nc	<i>Toxostoma lecontei</i> (Le Conte's Thrasher)	yes
G5	S3B	n	<i>Vermivora luciae</i> (Lucy's Warbler)	yes
G4	S3S4B	nc	<i>Vireo vicinior</i> (Gray Vireo)	yes

Last updated on 03/18/2004

[Return to Nevada Natural Heritage Program home page](#)